

|    | L # | Hits  | Search Text  | DBs                                 |
|----|-----|-------|--|-------------------------------------|
| 1  | L1  | 770   | (fold\$3 compound double multiple) adj2 compare  | USPAT;<br>US-PGPUB                  |
| 2  | L2  | 7726  | (fault trap exception) near20 (previous\$3 earlier first compar\$4) near10 (data value result)   | USPAT;<br>US-PGPUB                  |
| 3  | L3  | 18    | 1 and 2  | USPAT;<br>US-PGPUB                  |
| 4  | L7  | 44    | (fault trap exception) near20 (data value result) and 1 not 3  | USPAT;<br>US-PGPUB                  |
| 5  | L4  | 31    | ((fold\$3 compound double multiple) adj2 compare).ab,ti.   | USPAT;<br>US-PGPUB                  |
| 6  | L8  | 3     | (fault trap exception) and 4 not (3 5 7)   | USPAT;<br>US-PGPUB                  |
| 7  | L5  | 2     | (fault trap exception) near99 1  | USPAT;<br>US-PGPUB                  |
| 8  | L11 | 218   | (fold\$3 compound double multiple) adj2 compare  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 9  | L12 | 1     | (fault trap exception) near20 (operand data value result) and 11   | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 10 | L13 | 3     | (fault trap exception) and 11  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 11 | L14 | 47    | (fault trap exception) near20 (operand data value result) and 1 not 3  | USPAT;<br>US-PGPUB                  |
| 12 | L19 | 1100  | (exception trap\$3 fault) near10 ((memory page cache access\$3 fetch\$3 load\$3 read\$3 second next subsequent later) near10 (location position line address data operand)) near20 ((previous\$3 earlier first compar\$4) near5 (data value operand result)) | USPAT;<br>US-PGPUB                  |
| 13 | L21 | 431   | (exception trap\$3 fault) near10 ((memory page cache access\$3 fetch\$3 load\$3 read\$3 second next subsequent later) near10 (location position line address data operand)) near20 ((previous\$3 earlier first compar\$4) near5 (data value operand result)) | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 14 | L24 | 7654  | instruction near20 (vector simd (plural plurality multiple multiplicity several two second) adj5 (memory cache page access\$3 read load\$3 fetch\$3 location position address line data operand))  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 15 | L26 | 30524 | instruction near20 (vector simd (plural plurality multiple multiplicity several two second) adj5 (memory cache page access\$3 read load\$3 fetch\$3 location position address line data operand))  | USPAT;<br>US-PGPUB                  |
| 16 | L28 | 274   | 19 and 26  | USPAT;<br>US-PGPUB                  |
| 17 | L33 | 8     | 21 and 24  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |

|    | L # | Hits  | Search Text  | DBs                                 |
|----|-----|-------|--|-------------------------------------|
| 1  | L1  | 770   | (fold\$3 compound double multiple) adj2 compare  | USPAT;<br>US-PGPUB                  |
| 2  | L2  | 7726  | (fault trap exception) near20 (previous\$3 earlier first compar\$4) near10 (data value result)   | USPAT;<br>US-PGPUB                  |
| 3  | L3  | 18    | 1 and 2  | USPAT;<br>US-PGPUB                  |
| 4  | L7  | 44    | (fault trap exception) near20 (data value result) and 1 not 3  | USPAT;<br>US-PGPUB                  |
| 5  | L4  | 31    | ((fold\$3 compound double multiple) adj2 compare).ab,ti.   | USPAT;<br>US-PGPUB                  |
| 6  | L8  | 3     | (fault trap exception) and 4 not (3 5 7)   | USPAT;<br>US-PGPUB                  |
| 7  | L5  | 2     | (fault trap exception) near99 1  | USPAT;<br>US-PGPUB                  |
| 8  | L11 | 218   | (fold\$3 compound double multiple) adj2 compare  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 9  | L12 | 1     | (fault trap exception) near20 (operand data value result) and 11   | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 10 | L13 | 3     | (fault trap exception) and 11  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 11 | L14 | 47    | (fault trap exception) near20 (operand data value result) and 1 not 3  | USPAT;<br>US-PGPUB                  |
| 12 | L19 | 1100  | (exception trap\$3 fault) near10 ((memory page cache access\$3 fetch\$3 load\$3 read\$3 second next subsequent later) near10 (location position line address data operand)) near20 ((previous\$3 earlier first compar\$4) near5 (data value operand result)) | USPAT;<br>US-PGPUB                  |
| 13 | L21 | 431   | (exception trap\$3 fault) near10 ((memory page cache access\$3 fetch\$3 load\$3 read\$3 second next subsequent later) near10 (location position line address data operand)) near20 ((previous\$3 earlier first compar\$4) near5 (data value operand result)) | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 14 | L24 | 7654  | instruction near20 (vector simd (plural plurality multiple multiplicity several two second) adj5 (memory cache page access\$3 read load\$3 fetch\$3 location position address line data operand))  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 15 | L26 | 30524 | instruction near20 (vector simd (plural plurality multiple multiplicity several two second) adj5 (memory cache page access\$3 read load\$3 fetch\$3 location position address line data operand))  | USPAT;<br>US-PGPUB                  |
| 16 | L28 | 274   | 19 and 26  | USPAT;<br>US-PGPUB                  |
| 17 | L30 | 8     | 21 and 24  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |

|    | Docum<br>ent<br>ID           | U                                   | Title  | Current<br>OR  |
|----|------------------------------|-------------------------------------|--|----------------|
| 1  | US<br>20040<br>05481<br>3 A1 | <input type="checkbox"/>            | TCP offload network interface device   | 709/250        |
| 2  | US<br>20040<br>04229<br>3 A1 | <input checked="" type="checkbox"/> | Semiconductor memory and method of testing the same  | 365/202        |
| 3  | US<br>20040<br>03074<br>5 A1 | <input checked="" type="checkbox"/> | Method and apparatus for distributing network traffic processing on a multiprocessor computer                              | 709/203        |
| 4  | US<br>20040<br>01977<br>4 A1 | <input checked="" type="checkbox"/> | Processor device and information processing device, compiling device, and compiling method using said processor device     | 712/244        |
| 5  | US<br>20040<br>01976<br>8 A1 | <input checked="" type="checkbox"/> | Method and system for using dynamic, deferred operation information to control eager deferral of control-speculative loads | 712/216        |
| 6  | US<br>20040<br>01954<br>2 A1 | <input checked="" type="checkbox"/> | Timesheet reporting and extraction system and method   | 705/32         |
| 7  | US<br>20040<br>01568<br>0 A1 | <input checked="" type="checkbox"/> | Data processor for modifying and executing operation of instruction code   | 712/226        |
| 8  | US<br>20040<br>00312<br>6 A1 | <input checked="" type="checkbox"/> | TCP/IP offload network interface device  | 709/250        |
| 9  | US<br>20040<br>00100<br>8 A1 | <input checked="" type="checkbox"/> | Dynamic self-configuring metering network  | 340/870<br>.02 |
| 10 | US<br>20030<br>20470<br>5 A1 | <input checked="" type="checkbox"/> | Prediction of branch instructions in a data processing apparatus   | 712/207        |
| 11 | US<br>20030<br>14957<br>8 A1 | <input checked="" type="checkbox"/> | Intelligent procurement agent  | 705/1          |
| 12 | US<br>20030<br>12097<br>4 A1 | <input checked="" type="checkbox"/> | Programable multi-port memory bist with compact microcode  | 714/31         |
| 13 | US<br>20030<br>09752<br>4 A1 | <input checked="" type="checkbox"/> | System, apparatus and method providing adaptive write policy for disk array controllers                                    | 711/114        |
| 14 | US<br>20030<br>06361<br>3 A1 | <input checked="" type="checkbox"/> | Label switched communication network and system and method for path restoration  | 370/401        |
| 15 | US<br>20030<br>06147<br>1 A1 | <input checked="" type="checkbox"/> | Data processor   | 712/226        |
| 16 | US<br>20030<br>04379<br>2 A1 | <input checked="" type="checkbox"/> | Label switched communication network, a method of conditioning the network and a method of data transmission               | 370/386        |
| 17 | US<br>20030<br>02874<br>6 A1 | <input checked="" type="checkbox"/> | Multiple address translations  | 711/206        |

|    | Docum<br>ent<br>ID           | U                                   | Title  | Current<br>OR |
|----|------------------------------|-------------------------------------|--|---------------|
| 18 | US<br>20020<br>19908<br>7 A1 | <input checked="" type="checkbox"/> | Configuration control within data processing systems   | 712/227       |
| 19 | US<br>20020<br>19153<br>8 A1 | <input checked="" type="checkbox"/> | Bi-directional line switched ring with uninterrupted service restoration                               | 370/222       |
| 20 | US<br>20020<br>18447<br>7 A1 | <input checked="" type="checkbox"/> | Apparatus and method for facilitating debugging of sequences of processing instructions                | 712/227       |
| 21 | US<br>20020<br>18429<br>2 A1 | <input checked="" type="checkbox"/> | Method and apparatus for exception handling in a multi-processing environment                          | 718/102       |
| 22 | US<br>20020<br>16611<br>3 A1 | <input checked="" type="checkbox"/> | Compiler generation of instruction sequences for unresolved storage references                         | 717/140       |
| 23 | US<br>20020<br>16191<br>9 A1 | <input checked="" type="checkbox"/> | Fast-path processing for receiving data on TCP connection offload devices                              | 709/238       |
| 24 | US<br>20020<br>15692<br>7 A1 | <input checked="" type="checkbox"/> | TCP/IP offload network interface device  | 709/250       |
| 25 | US<br>20020<br>15437<br>0 A1 | <input checked="" type="checkbox"/> | Optic relay unit and terminal station in light transmission system                                     | 398/177       |
| 26 | US<br>20020<br>14787<br>2 A1 | <input checked="" type="checkbox"/> | Sequentially performed compound compare-and-swap   | 710/200       |
| 27 | US<br>20020<br>14783<br>9 A1 | <input checked="" type="checkbox"/> | Fast-path apparatus for receiving data corresponding to a TCP connection                               | 709/238       |
| 28 | US<br>20020<br>13369<br>2 A1 | <input checked="" type="checkbox"/> | Data processor   | 712/244       |
| 29 | US<br>20020<br>12083<br>0 A1 | <input checked="" type="checkbox"/> | Data processor assigning the same operation code to multiple operations                                | 712/209       |
| 30 | US<br>20020<br>09184<br>4 A1 | <input checked="" type="checkbox"/> | Network interface device that fast-path processes solicited session layer read commands                | 709/230       |
| 31 | US<br>20020<br>08784<br>1 A1 | <input checked="" type="checkbox"/> | Circuit and method for supporting misaligned accesses in the presence of speculative load Instructions | 712/225       |
| 32 | US<br>20020<br>08773<br>2 A1 | <input checked="" type="checkbox"/> | Transmit fast-path processing on TCP/IP offload network interface device                               | 709/250       |
| 33 | US<br>20020<br>08324<br>3 A1 | <input checked="" type="checkbox"/> | Clustered computer system with deadlock avoidance  | 710/107       |
| 34 | US<br>20020<br>08314<br>9 A1 | <input checked="" type="checkbox"/> | Method for deadlock avoidance in a cluster environment   | 709/215       |

|    | Docum<br>ent<br>ID           | U                                   | Title  | Current<br>OR |
|----|------------------------------|-------------------------------------|--|---------------|
| 35 | US<br>20020<br>07778<br>2 A1 | <input checked="" type="checkbox"/> | Secured microcontroller architecture   | 702/185       |
| 36 | US<br>20020<br>05954<br>6 A1 | <input checked="" type="checkbox"/> | Method of generating a pattern for testing a logic circuit and apparatus for doing the same  | 714/738       |
| 37 | US<br>20020<br>04453<br>6 A1 | <input checked="" type="checkbox"/> | WIRELESS COMMUNICATION SYSTEM HAVING NETWORK CONTROLLER AND WIRELESS COMMUNICATION DEVICE CONNECTED TO DIGITAL COMMUNICATION LINE, AND METHOD OF CONTROLLING SAID SYSTEM | 370/329       |
| 38 | US<br>20020<br>01388<br>9 A1 | <input checked="" type="checkbox"/> | Distributed shared memory system with variable granularity   | 711/203       |
| 39 | US<br>20020<br>00266<br>9 A1 | <input checked="" type="checkbox"/> | DATA PROCESSOR   | 712/244       |
| 40 | US<br>20010<br>04215<br>8 A1 | <input checked="" type="checkbox"/> | METHOD OF PERFORMING RELIABLE UPDATES IN A SYMMETRICALLY BLOCKED NONVOLATILE MEMORY HAVING A BIFURCATED STORAGE ARCHITECTURE   | 711/103       |
| 41 | US<br>20010<br>03740<br>6 A1 | <input checked="" type="checkbox"/> | Intelligent network storage interface system   | 709/250       |
| 42 | US<br>20010<br>03739<br>7 A1 | <input checked="" type="checkbox"/> | Intelligent network interface system and method for accelerated protocol processing  | 709/230       |
| 43 | US<br>20010<br>03482<br>7 A1 | <input checked="" type="checkbox"/> | Active load address buffer   | 712/225       |
| 44 | US<br>20010<br>02749<br>6 A1 | <input checked="" type="checkbox"/> | Passing a communication control block to a local device such that a message is processed on the device   | 709/250       |
| 45 | US<br>20010<br>02346<br>0 A1 | <input checked="" type="checkbox"/> | Passing a communication control block from host to a local device such that a message is processed on the device   | 709/250       |
| 46 | US<br>20010<br>01682<br>7 A1 | <input checked="" type="checkbox"/> | Methods and apparatus for electronically storing and retrieving value information on a portable card   | 705/14        |
| 47 | US<br>20010<br>01008<br>4 A1 | <input checked="" type="checkbox"/> | Memory fault diagnosis and data restoration method, and memory apparatus using the same  | 714/42        |
| 48 | US<br>20010<br>00588<br>2 A1 | <input checked="" type="checkbox"/> | CIRCUIT AND METHOD FOR INITIATING EXCEPTION ROUTINES USING IMPLICIT EXCEPTION CHECKING   | 712/244       |
| 49 | US<br>20010<br>00475<br>7 A1 | <input checked="" type="checkbox"/> | Processor and method of controlling the same   | 712/218       |
| 50 | US<br>67014<br>27 B1         | <input checked="" type="checkbox"/> | Data processing apparatus and method for processing floating point instructions  | 712/244       |
| 51 | US<br>66944<br>54 B1         | <input checked="" type="checkbox"/> | Stuck and transient fault diagnostic system  | 714/30        |
| 52 | US<br>66813<br>22 B1         | <input checked="" type="checkbox"/> | Method and apparatus for emulating an instruction set extension in a digital computer system   | 712/244       |

|    | Docu<br>ment<br>ID   | U                                   | Title   | Current<br>OR |
|----|----------------------|-------------------------------------|---|---------------|
| 53 | US<br>66657<br>08 B1 | <input checked="" type="checkbox"/> | Coarse grained determination of data dependence between parallel executed jobs in an information processing system                          | 709/215       |
| 54 | US<br>66584<br>80 B2 | <input checked="" type="checkbox"/> | Intelligent network interface system and method for accelerated protocol processing   | 709/239       |
| 55 | US<br>66549<br>14 B1 | <input checked="" type="checkbox"/> | Network fault isolation   | 714/43        |
| 56 | US<br>66403<br>15 B1 | <input checked="" type="checkbox"/> | Method and apparatus for enhancing instruction level parallelism  | 714/17        |
| 57 | US<br>66313<br>92 B1 | <input checked="" type="checkbox"/> | Method and apparatus for predicting floating-point exceptions   | 708/498       |
| 58 | US<br>66292<br>31 B1 | <input checked="" type="checkbox"/> | System and method for efficient register file conversion of denormal numbers between scalar and SIMD formats                                | 712/1         |
| 59 | US<br>66222<br>69 B1 | <input checked="" type="checkbox"/> | Memory fault isolation apparatus and methods  | 714/718       |
| 60 | US<br>65981<br>22 B2 | <input checked="" type="checkbox"/> | Active load address buffer  | 711/126       |
| 61 | US<br>65947<br>85 B1 | <input checked="" type="checkbox"/> | System and method for fault handling and recovery in a multi-processing system having hardware resources shared between multiple partitions | 714/48        |
| 62 | US<br>65947<br>52 B1 | <input checked="" type="checkbox"/> | Meta-address architecture for parallel, dynamically reconfigurable computing  | 712/43        |
| 63 | US<br>65913<br>55 B2 | <input checked="" type="checkbox"/> | Distributed shared memory system with variable granularity  | 711/202       |
| 64 | US<br>65913<br>02 B2 | <input checked="" type="checkbox"/> | Fast-path apparatus for receiving data corresponding to a TCP connection  | 709/230       |
| 65 | US<br>65872<br>36 B1 | <input checked="" type="checkbox"/> | Fiber optic errorless switching system  | 398/5         |
| 66 | US<br>65811<br>50 B1 | <input checked="" type="checkbox"/> | Apparatus and method for improved non-page fault loads and stores   | 711/201       |
| 67 | US<br>65747<br>09 B1 | <input checked="" type="checkbox"/> | System, apparatus, and method providing cache data mirroring to a data storage system   | 711/119       |
| 68 | US<br>65430<br>06 B1 | <input checked="" type="checkbox"/> | Method and apparatus for automatic undo support   | 714/19        |
| 69 | US<br>65429<br>90 B1 | <input checked="" type="checkbox"/> | Array access boundary check by executing BNDCHK instruction with comparison specifiers  | 712/227       |
| 70 | US<br>65360<br>08 B1 | <input checked="" type="checkbox"/> | Fault insertion method, boundary scan cells, and integrated circuit for use therewith   | 714/726       |
| 71 | US<br>65197<br>25 B1 | <input checked="" type="checkbox"/> | Diagnosis of RAMS using functional patterns   | 714/718       |
| 72 | US<br>65105<br>30 B1 | <input checked="" type="checkbox"/> | At-speed built-in self testing of multi-port compact sRAMs  | 714/30        |
| 73 | US<br>64991<br>17 B1 | <input checked="" type="checkbox"/> | Network fault information management system in which fault nodes are displayed in tree form   | 714/49        |
| 74 | US<br>64842<br>53 B1 | <input checked="" type="checkbox"/> | Data processor  | 712/212       |
| 75 | US<br>64346<br>20 B1 | <input checked="" type="checkbox"/> | TCP/IP offload network interface device   | 709/230       |

|    | Docum<br>ent<br>ID   | U                                   | Title  | Current<br>OR |
|----|----------------------|-------------------------------------|--|---------------|
| 76 | US<br>64271<br>73 B1 | <input checked="" type="checkbox"/> | Intelligent network interfaced device and system for accelerated communication   | 709/238       |
| 77 | US<br>64250<br>39 B2 | <input checked="" type="checkbox"/> | Accessing exception handlers without translating the address   | 710/269       |
| 78 | US<br>64153<br>94 B1 | <input checked="" type="checkbox"/> | Method and circuit for analysis of the operation of a microcontroller using signature analysis during operation  | 714/30        |
| 79 | US<br>64120<br>81 B1 | <input checked="" type="checkbox"/> | System and method for providing a trap and patch function to low power, cost conscious, and space constrained applications                               | 714/34        |
| 80 | US<br>64120<br>40 B2 | <input checked="" type="checkbox"/> | Method of performing reliable updates in a symmetrically blocked nonvolatile memory having a bifurcated storage architecture                             | 711/103       |
| 81 | US<br>64083<br>83 B1 | <input checked="" type="checkbox"/> | Array access boundary check by executing BNDCHK instruction with comparison specifiers   | 712/227       |
| 82 | US<br>63934<br>87 B2 | <input checked="" type="checkbox"/> | Passing a communication control block to a local device such that a message is processed on the device   | 709/238       |
| 83 | US<br>63894<br>79 B1 | <input checked="" type="checkbox"/> | Intelligent network interface device and system for accelerated communication  | 709/243       |
| 84 | US<br>63816<br>86 B1 | <input checked="" type="checkbox"/> | Parallel processor comprising multiple sub-banks to which access requests are bypassed from a request queue when corresponding page faults are generated | 711/203       |
| 85 | US<br>63780<br>67 B1 | <input checked="" type="checkbox"/> | Exception reporting architecture for SIMD-FP instructions  | 712/244       |
| 86 | US<br>63743<br>47 B1 | <input checked="" type="checkbox"/> | Register file backup queue   | 712/228       |
| 87 | US<br>63603<br>14 B1 | <input checked="" type="checkbox"/> | Data cache having store queue bypass for out-of-order instruction execution and method for same  | 712/219       |
| 88 | US<br>63570<br>33 B1 | <input checked="" type="checkbox"/> | Communication processing control apparatus and information processing system having the same   | 714/758       |
| 89 | US<br>63341<br>53 B1 | <input checked="" type="checkbox"/> | Passing a communication control block from host to a local device such that a message is processed on the device   | 709/230       |
| 90 | US<br>63049<br>58 B1 | <input checked="" type="checkbox"/> | Microcomputer having data execution units mounted thereon  | 712/229       |
| 91 | US<br>62984<br>36 B1 | <input checked="" type="checkbox"/> | Method and system for performing atomic memory accesses in a processor system  | 712/220       |
| 92 | US<br>62894<br>45 B1 | <input checked="" type="checkbox"/> | Circuit and method for initiating exception routines using implicit exception checking   | 712/244       |
| 93 | US<br>62791<br>28 B1 | <input checked="" type="checkbox"/> | Autonomous system for recognition of patterns formed by stored data during computer memory scrubbing   | 714/49        |
| 94 | US<br>62759<br>82 B1 | <input checked="" type="checkbox"/> | Method and device enabling a fixed program to be developed   | 717/168       |
| 95 | US<br>62726<br>12 B1 | <input checked="" type="checkbox"/> | Process for allocating memory in a multiprocessor data processing system   | 711/203       |
| 96 | US<br>62694<br>07 B1 | <input checked="" type="checkbox"/> | Method and system for data filtering within an object-oriented data  | 719/315       |
| 97 | US<br>62666<br>47 B1 | <input checked="" type="checkbox"/> | Methods and apparatus for electronically storing and retrieving value information on a portable card   | 705/14        |
| 98 | US<br>62470<br>60 B1 | <input checked="" type="checkbox"/> | Passing a communication control block from host to a local device such that a message is processed on the device   | 709/238       |

|     | Docum<br>ent<br>ID   | U                                   | Title   | Current<br>OR |
|-----|----------------------|-------------------------------------|---|---------------|
| 99  | US<br>62266<br>80 B1 | <input checked="" type="checkbox"/> | Intelligent network interface system method for protocol processing   | 709/230       |
| 100 | US<br>62090<br>81 B1 | <input checked="" type="checkbox"/> | Method and system for nonsequential instruction dispatch and execution in a superscalar processor system  | 712/215       |
| 101 | US<br>61890<br>93 B1 | <input checked="" type="checkbox"/> | System for initiating exception routine in response to memory access exception by storing exception information and exception bit within architected register | 712/244       |
| 102 | US<br>61822<br>06 B1 | <input checked="" type="checkbox"/> | Dynamically reconfigurable computing using a processing unit having changeable internal hardware organization   | 712/43        |
| 103 | US<br>61192<br>18 A  | <input checked="" type="checkbox"/> | Method and apparatus for prefetching data in a computer system  | 712/207       |
| 104 | US<br>61051<br>29 A  | <input checked="" type="checkbox"/> | Converting register data from a first format type to a second format type if a second type instruction consumes data produced by a first type instruction     | 712/222       |
| 105 | US<br>61015<br>80 A  | <input checked="" type="checkbox"/> | Apparatus and method for assisting exact garbage collection by using a stack cache of tag bits  | 711/132       |
| 106 | US<br>60980<br>89 A  | <input checked="" type="checkbox"/> | Generation isolation system and method for garbage collection   | 718/104       |
| 107 | US<br>60887<br>59 A  | <input checked="" type="checkbox"/> | Method of performing reliable updates in a symmetrically blocked nonvolatile memory having a bifurcated storage architecture                                  | 711/103       |
| 108 | US<br>60853<br>12 A  | <input checked="" type="checkbox"/> | Method and apparatus for handling imprecise exceptions  | 712/208       |
| 109 | US<br>60713<br>17 A  | <input checked="" type="checkbox"/> | Object code logic analysis and automated modification system and method   | 717/128       |
| 110 | US<br>60584<br>69 A  | <input checked="" type="checkbox"/> | System and method for dynamically reconfigurable computing using a processing unit having changeable internal hardware organization                           | 712/43        |
| 111 | US<br>60527<br>74 A  | <input checked="" type="checkbox"/> | Apparatus and method for identifying exception routines indicated by instruction address issued with an instruction fetch command                             | 712/200       |
| 112 | US<br>60498<br>66 A  | <input checked="" type="checkbox"/> | Method and system for an efficient user mode cache manipulation using a simulated instruction   | 712/227       |
| 113 | US<br>60386<br>61 A  | <input checked="" type="checkbox"/> | Single-chip data processor handling synchronous and asynchronous exceptions by branching from a first exception handler to a second exception handler         | 712/244       |
| 114 | US<br>60322<br>65 A  | <input checked="" type="checkbox"/> | Fault-tolerant computer system  | 714/9         |
| 115 | US<br>60119<br>08 A  | <input checked="" type="checkbox"/> | Gated store buffer for an advanced microprocessor   | 714/19        |
| 116 | US<br>60095<br>16 A  | <input checked="" type="checkbox"/> | Pipelined microprocessor with efficient self-modifying code detection and handling  | 712/244       |
| 117 | US<br>60055<br>02 A  | <input checked="" type="checkbox"/> | Method for reducing the number of bits needed for the representation of constant values in a data processing device   | 341/65        |
| 118 | US<br>59960<br>62 A  | <input checked="" type="checkbox"/> | Method and apparatus for controlling an instruction pipeline in a data processing system  | 712/215       |
| 119 | US<br>59745<br>38 A  | <input checked="" type="checkbox"/> | Method and apparatus for annotating operands in a computer system with source instruction identifiers   | 712/218       |
| 120 | US<br>59665<br>29 A  | <input checked="" type="checkbox"/> | Processor having auxiliary operand register file and complementary arrangements for non-disruptively performing adjunct execution                             | 712/228       |
| 121 | US<br>59580<br>70 A  | <input checked="" type="checkbox"/> | Remote checkpoint memory system and protocol for fault-tolerant computer system   | 714/13        |



|     | Docum<br>ent<br>ID  | U                                   | Title  | Current<br>OR |
|-----|---------------------|-------------------------------------|--|---------------|
| 122 | US<br>59516<br>76 A | <input checked="" type="checkbox"/> | Apparatus and method for direct loading of offset register during pointer load operation   | 712/225       |
| 123 | US<br>59480<br>95 A | <input checked="" type="checkbox"/> | Method and apparatus for prefetching data in a computer system   | 712/200       |
| 124 | US<br>59304<br>95 A | <input checked="" type="checkbox"/> | Method and system for processing a first instruction in a first processing environment in response to initiating processing of a second instruction in a emulation environment | 703/26        |
| 125 | US<br>59268<br>32 A | <input checked="" type="checkbox"/> | Method and apparatus for aliasing memory data in an advanced microprocessor  | 711/141       |
| 126 | US<br>59241<br>14 A | <input checked="" type="checkbox"/> | Circular buffer with two different step sizes  | 711/110       |
| 127 | US<br>59129<br>06 A | <input checked="" type="checkbox"/> | Method and apparatus for recovering from correctable ECC errors  | 714/763       |
| 128 | US<br>59037<br>39 A | <input checked="" type="checkbox"/> | System and method for processing load instruction in accordance with "no-fault" processing facility including arrangement for preserving access fault indicia                  | 712/216       |
| 129 | US<br>59013<br>01 A | <input checked="" type="checkbox"/> | Data processor and method of processing data   | 712/212       |
| 130 | US<br>58988<br>82 A | <input checked="" type="checkbox"/> | Method and system for enhanced instruction dispatch in a superscalar processor system utilizing independently accessed intermediate storage                                    | 712/23        |
| 131 | US<br>58965<br>26 A | <input checked="" type="checkbox"/> | Programmable instruction trap system and method  | 712/227       |
| 132 | US<br>58901<br>89 A | <input checked="" type="checkbox"/> | Memory management and protection system for virtual memory in computer system  | 711/100       |
| 133 | US<br>58812<br>16 A | <input checked="" type="checkbox"/> | Register file backup queue   | 714/15        |
| 134 | US<br>58452<br>98 A | <input checked="" type="checkbox"/> | Write barrier system and method for trapping garbage collection page boundary crossing pointer stores  | 707/206       |
| 135 | US<br>58388<br>94 A | <input checked="" type="checkbox"/> | Logical, fail-functional, dual central processor units formed from three processor units   | 714/11        |
| 136 | US<br>58128<br>68 A | <input checked="" type="checkbox"/> | Method and apparatus for selecting a register file in a data processing system   | 712/23        |
| 137 | US<br>58127<br>59 A | <input checked="" type="checkbox"/> | Fault handling with loaded functions   | 714/57        |
| 138 | US<br>58023<br>37 A | <input checked="" type="checkbox"/> | Method and apparatus for executing load instructions speculatively   | 712/216       |
| 139 | US<br>57940<br>62 A | <input checked="" type="checkbox"/> | System and method for dynamically reconfigurable computing using a processing unit having changeable internal hardware organization  | 712/30        |
| 140 | US<br>57908<br>26 A | <input checked="" type="checkbox"/> | Reduced register-dependency checking for paired-instruction dispatch in a superscalar processor with partial register writes   | 712/216       |
| 141 | US<br>57907<br>76 A | <input checked="" type="checkbox"/> | Apparatus for detecting divergence between a pair of duplexed, synchronized processor elements   | 714/10        |
| 142 | US<br>57685<br>00 A | <input checked="" type="checkbox"/> | Interrupt-based hardware support for profiling memory system performance   | 714/47        |
| 143 | US<br>57649<br>42 A | <input checked="" type="checkbox"/> | Method and system for selective serialization of instruction processing in a superscalar processor system  | 712/214       |
| 144 | US<br>57614<br>13 A | <input checked="" type="checkbox"/> | Fault containment system for multiprocessor with shared memory   | 714/49        |

|     | Docum<br>ent<br>ID  | U                                   | Title  | Current<br>OR |
|-----|---------------------|-------------------------------------|--|---------------|
| 145 | US<br>57580<br>51 A | <input checked="" type="checkbox"/> | Method and apparatus for reordering memory operations in a processor   | 714/2         |
| 146 | US<br>57519<br>46 A | <input checked="" type="checkbox"/> | Method and system for detecting bypass error conditions in a load/store unit of a superscalar processor  | 714/50        |
| 147 | US<br>57488<br>73 A | <input checked="" type="checkbox"/> | Fault recovering system provided in highly reliable computer system having duplicated processors   | 714/11        |
| 148 | US<br>57427<br>94 A | <input checked="" type="checkbox"/> | Emulation techniques for computer systems having mixed processor/software configurations   | 703/26        |
| 149 | US<br>57369<br>87 A | <input checked="" type="checkbox"/> | Compression of graphic data normals  | 345/420       |
| 150 | US<br>57269<br>75 A | <input checked="" type="checkbox"/> | Switching system capable of performing alternative routing in accordance with an alternative routing scenario assembled in a maintenance terminal  | 370/228       |
| 151 | US<br>57129<br>97 A | <input checked="" type="checkbox"/> | System and method for processing load instruction in accordance with "no-fault " processing facility including arrangement for preserving access fault indicia   | 712/217       |
| 152 | US<br>57109<br>41 A | <input checked="" type="checkbox"/> | System for substituting protected mode hard disk driver for real mode driver by trapping test transfers to verify matching geometric translation   | 710/14        |
| 153 | US<br>57064<br>60 A | <input checked="" type="checkbox"/> | Variable architecture computer with vector parallel processor and using instructions with variable length fields   | 712/204       |
| 154 | US<br>57064<br>22 A | <input checked="" type="checkbox"/> | Method of locating fault of communication system   | 714/4         |
| 155 | US<br>57015<br>02 A | <input checked="" type="checkbox"/> | Isolating a central processing unit from the operating system controlling said unit and its associated hardware for interaction of the unit with data handling apparatus alien to the operating system | 709/201       |
| 156 | US<br>56995<br>06 A | <input checked="" type="checkbox"/> | Method and apparatus for fault testing a pipelined processor   | 714/37        |
| 157 | US<br>56895<br>13 A | <input checked="" type="checkbox"/> | Data transmission system having a backup testing facility  | 714/712       |
| 158 | US<br>56805<br>68 A | <input checked="" type="checkbox"/> | Instruction format with sequentially performable operand address extension modification  | 711/220       |
| 159 | US<br>56447<br>48 A | <input checked="" type="checkbox"/> | Processor system including an index buffer circuit and a translation look-aside buffer control circuit for processor-to-processor interfacing  | 711/207       |
| 160 | US<br>56363<br>41 A | <input checked="" type="checkbox"/> | Fault processing method and information processing system  | 714/13        |
| 161 | US<br>56279<br>87 A | <input checked="" type="checkbox"/> | Memory management and protection system for virtual memory in computer system  | 711/200       |
| 162 | US<br>56175<br>53 A | <input checked="" type="checkbox"/> | Computer system which switches bus protocols and controls the writing of a dirty page bit of an address translation buffer   | 711/206       |
| 163 | US<br>56088<br>67 A | <input checked="" type="checkbox"/> | Debugging system using virtual storage means, a normal bus cycle and a debugging bus cycle   | 714/47        |
| 164 | US<br>56008<br>48 A | <input checked="" type="checkbox"/> | Counterflow pipeline processor with instructions flowing in a first direction and instruction results flowing in the reverse direction   | 712/42        |
| 165 | US<br>55749<br>42 A | <input checked="" type="checkbox"/> | Hybrid execution unit for complex microprocessor   | 712/23        |
| 166 | US<br>55749<br>22 A | <input checked="" type="checkbox"/> | Processor with sequences of processor instructions for locked memory updates   | 712/220       |

|     | Docum<br>ent<br>ID  | U                                   | Title   | Current<br>OR |
|-----|---------------------|-------------------------------------|---|---------------|
| 167 | US<br>55600<br>36 A | <input checked="" type="checkbox"/> | Data processing having incircuit emulation function   | 712/227       |
| 168 | US<br>55599<br>77 A | <input checked="" type="checkbox"/> | Method and apparatus for executing floating point (FP) instruction pairs in a pipelined processor by stalling the following FP instructions in an execution stage   | 712/244       |
| 169 | US<br>55465<br>51 A | <input checked="" type="checkbox"/> | Method and circuitry for saving and restoring status information in a pipelined computer  | 707/102       |
| 170 | US<br>55420<br>52 A | <input checked="" type="checkbox"/> | Applying traps to a printed page specified in a page description language format  | 345/589       |
| 171 | US<br>55375<br>59 A | <input checked="" type="checkbox"/> | Exception handling circuit and method   | 712/244       |
| 172 | US<br>55049<br>25 A | <input checked="" type="checkbox"/> | Apparatus and method for implementing interrupts in pipelined processors  | 712/244       |
| 173 | US<br>55028<br>27 A | <input checked="" type="checkbox"/> | Pipelined data processor for floating point and integer operation with exception handling   | 712/244       |
| 174 | US<br>54918<br>29 A | <input checked="" type="checkbox"/> | Method and system for indexing the assignment of intermediate storage buffers in a superscalar processor system   | 712/23        |
| 175 | US<br>54695<br>52 A | <input checked="" type="checkbox"/> | Pipelined data processor having combined operand fetch and execution stage to reduce number of pipeline stages and penalty associated with branch instructions  | 712/244       |
| 176 | US<br>54653<br>73 A | <input checked="" type="checkbox"/> | Method and system for single cycle dispatch of multiple instructions in a superscalar processor system  | 712/215       |
| 177 | US<br>54407<br>57 A | <input checked="" type="checkbox"/> | Data processor having multistage store buffer for processing exceptions   | 712/228       |
| 178 | US<br>54386<br>70 A | <input checked="" type="checkbox"/> | Method of prechecking the validity of a write access request  | 711/3         |
| 179 | US<br>54286<br>24 A | <input checked="" type="checkbox"/> | Fault injection using boundary scan   | 714/727       |
| 180 | US<br>54045<br>57 A | <input checked="" type="checkbox"/> | Data processor with plural instruction execution parts for synchronized parallel processing and exception handling  | 712/23        |
| 181 | US<br>53903<br>10 A | <input checked="" type="checkbox"/> | Memory management unit having cross-domain control  | 711/203       |
| 182 | US<br>53882<br>15 A | <input checked="" type="checkbox"/> | Uncoupling a central processing unit from its associated hardware for interaction with data handling apparatus alien to the operating system controlling said unit and hardware   | 709/229       |
| 183 | US<br>53865<br>63 A | <input checked="" type="checkbox"/> | Register substitution during exception processing   | 712/228       |
| 184 | US<br>53697<br>67 A | <input checked="" type="checkbox"/> | Servicing interrupt requests in a data processing system without using the services of an operating system  | 710/264       |
| 185 | US<br>53697<br>49 A | <input checked="" type="checkbox"/> | Method and apparatus for the direct transfer of information between application programs running on distinct processors without utilizing the services of one or both operating systems                                     | 718/104       |
| 186 | US<br>53634<br>97 A | <input checked="" type="checkbox"/> | System for removing section of memory from first system and allocating to second system in a manner indiscernable to both operating systems   | 711/153       |
| 187 | US<br>53496<br>51 A | <input checked="" type="checkbox"/> | System for translation of virtual to physical addresses by operating memory management processor for calculating location of physical address in memory concurrently with cache comparing virtual addresses for translation | 711/207       |
| 188 | US<br>53394<br>08 A | <input checked="" type="checkbox"/> | Method and apparatus for reducing checking costs in fault tolerant processors   | 714/11        |

|     | Docum<br>ent<br>ID  | U                                   | Title  | Current<br>OR |
|-----|---------------------|-------------------------------------|--|---------------|
| 189 | US<br>53255<br>17 A | <input checked="" type="checkbox"/> | Fault tolerant data processing system  | 714/11        |
| 190 | US<br>52972<br>63 A | <input checked="" type="checkbox"/> | Microprocessor with pipeline system having exception processing features   | 712/244       |
| 191 | US<br>52952<br>36 A | <input checked="" type="checkbox"/> | Applying traps to a printed page specified in a page description language format   | 715/527       |
| 192 | US<br>52838<br>68 A | <input checked="" type="checkbox"/> | Providing additional system characteristics to a data processing system through operations of an application program, transparently to the operating system                    | 709/227       |
| 193 | US<br>52768<br>47 A | <input checked="" type="checkbox"/> | Method for locking and unlocking a computer address  | 711/163       |
| 194 | US<br>52768<br>22 A | <input checked="" type="checkbox"/> | System with enhanced execution of address-conflicting instructions using immediate data latch for holding immediate data of a preceding instruction                            | 712/218       |
| 195 | US<br>52631<br>53 A | <input checked="" type="checkbox"/> | Monitoring control flow in a microprocessor  | 714/51        |
| 196 | US<br>52553<br>67 A | <input checked="" type="checkbox"/> | Fault tolerant, synchronized twin computer system with error checking of I/O communication   | 714/11        |
| 197 | US<br>52337<br>00 A | <input checked="" type="checkbox"/> | Address translation device with an address translation buffer loaded with presence bits  | 711/207       |
| 198 | US<br>52206<br>69 A | <input checked="" type="checkbox"/> | Linkage mechanism for program isolation  | 718/108       |
| 199 | US<br>52147<br>70 A | <input checked="" type="checkbox"/> | System for flushing instruction-cache only when instruction-cache address and data-cache address are matched and the execution of a return-from-exception-or-interrupt command | 711/123       |
| 200 | US<br>52108<br>34 A | <input type="checkbox"/>            | High speed transfer of instructions from a master to a slave processor   | 712/207       |

|    | L # | Hits  | Search Text  | DBs                                 |
|----|-----|-------|--|-------------------------------------|
| 1  | L1  | 770   | (fold\$3 compound double multiple) adj2 compare  | USPAT;<br>US-PGPUB                  |
| 2  | L2  | 7726  | (fault trap exception) near20 (previous\$3 earlier first compar\$4) near10 (data value result)   | USPAT;<br>US-PGPUB                  |
| 3  | L3  | 18    | 1 and 2  | USPAT;<br>US-PGPUB                  |
| 4  | L7  | 44    | (fault trap exception) near20 (data value result) and 1 not 3  | USPAT;<br>US-PGPUB                  |
| 5  | L4  | 31    | ((fold\$3 compound double multiple) adj2 compare).ab,ti.   | USPAT;<br>US-PGPUB                  |
| 6  | L8  | 3     | (fault trap exception) and 4 not (3 5 7)   | USPAT;<br>US-PGPUB                  |
| 7  | L5  | 2     | (fault trap exception) near99 1  | USPAT;<br>US-PGPUB                  |
| 8  | L11 | 218   | (fold\$3 compound double multiple) adj2 compare  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 9  | L12 | 1     | (fault trap exception) near20 (operand data value result) and 11   | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 10 | L13 | 3     | (fault trap exception) and 11  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 11 | L14 | 47    | (fault trap exception) near20 (operand data value result) and 1 not 3  | USPAT;<br>US-PGPUB                  |
| 12 | L19 | 1100  | (exception trap\$3 fault) near10 ((memory page cache access\$3 fetch\$3 load\$3 read\$3 second next subsequent later) near10 (location position line address data operand)) near20 ((previous\$3 earlier first compar\$4) near5 (data value operand result)) | USPAT;<br>US-PGPUB                  |
| 13 | L21 | 431   | (exception trap\$3 fault) near10 ((memory page cache access\$3 fetch\$3 load\$3 read\$3 second next subsequent later) near10 (location position line address data operand)) near20 ((previous\$3 earlier first compar\$4) near5 (data value operand result)) | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 14 | L24 | 7654  | instruction near20 (vector simd (plural plurality multiple multiplicity several two second) adj5 (memory cache page access\$3 read load\$3 fetch\$3 location position address line data operand))  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 15 | L26 | 30524 | instruction near20 (vector simd (plural plurality multiple multiplicity several two second) adj5 (memory cache page access\$3 read load\$3 fetch\$3 location position address line data operand))  | USPAT;<br>US-PGPUB                  |
| 16 | L28 | 274   | 19 and 26  | USPAT;<br>US-PGPUB                  |
| 17 | L33 | 8     | 21 and 24  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |

|    | Docum<br>ent<br>ID           | U                        | Title   | Current<br>OR  |
|----|------------------------------|--------------------------|---|----------------|
| 1  | US<br>20030<br>17455<br>5 A1 | <input type="checkbox"/> | Novel method and structure for efficient data verification operation for non-volatile memories  | 365/200        |
| 2  | US<br>20030<br>12332<br>0 A1 | <input type="checkbox"/> | Synchronous dynamic random access memory device   | 365/233        |
| 3  | US<br>20020<br>14787<br>2 A1 | <input type="checkbox"/> | Sequentially performed compound compare-and-swap  | 710/200        |
| 4  | US<br>20020<br>12652<br>8 A1 | <input type="checkbox"/> | Novel method and structure for efficient data verification operation for non-volatile memories  | 365/185<br>.04 |
| 5  | US<br>20020<br>05772<br>2 A1 | <input type="checkbox"/> | Recording/reproducing apparatus, and method of detecting state thereof  | 372/43         |
| 6  | US<br>66652<br>22 B2         | <input type="checkbox"/> | Synchronous dynamic random access memory device   | 365/203        |
| 7  | US<br>65601<br>43 B2         | <input type="checkbox"/> | Method and structure for efficient data verification operation for non-volatile memories  | 365/185<br>.04 |
| 8  | US<br>65127<br>11 B1         | <input type="checkbox"/> | Synchronous dynamic random access memory device   | 365/203        |
| 9  | US<br>64012<br>29 B1         | <input type="checkbox"/> | System and method for data error recovery on optical media utilizing hierarchical recovery techniques   | 714/769        |
| 10 | US<br>63737<br>52 B1         | <input type="checkbox"/> | Synchronous dynamic random access memory device   | 365/189<br>.05 |
| 11 | US<br>63514<br>04 B1         | <input type="checkbox"/> | Synchronous dynamic random access memory device   | 365/51         |
| 12 | US<br>62826<br>33 B1         | <input type="checkbox"/> | High data density RISC processor  | 712/208        |
| 13 | US<br>62157<br>09 B1         | <input type="checkbox"/> | Synchronous dynamic random access memory device   | 365/189<br>.11 |
| 14 | US<br>62121<br>11 B1         | <input type="checkbox"/> | Synchronous dynamic random access memory device   | 365/200        |
| 15 | US<br>61729<br>35 B1         | <input type="checkbox"/> | Synchronous dynamic random access memory device   | 365/233        |
| 16 | US<br>61287<br>10 A          | <input type="checkbox"/> | Method utilizing a set of blocking-symbol resource-manipulation instructions for protecting the integrity of data in noncontiguous data objects of resources in a shared memory of a multiple processor computer system | 711/152        |
| 17 | US<br>53471<br>90 A          | <input type="checkbox"/> | Magnetic bearing systems  | 310/90.<br>5   |
| 18 | US<br>45410<br>94 A          | <input type="checkbox"/> | Self-checking computer circuitry  | 714/53         |

|   | Docum<br>ent<br>ID           | U                                   | Title  | Current<br>OR  |
|---|------------------------------|-------------------------------------|--|----------------|
| 1 | US<br>20020<br>14787<br>2 A1 | <input type="checkbox"/>            | Sequentially performed compound compare-and-swap                     | 710/200        |
| 2 | US<br>43596<br>24 A          | <input checked="" type="checkbox"/> | Welding apparatus with automatic following of the joint to be welded | 219/124<br>.34 |

|    | Docum<br>ent<br>ID  | U                        | Title   | Current<br>OR  |
|----|---------------------|--------------------------|---|----------------|
| 36 | US<br>61254<br>39 A | <input type="checkbox"/> | Process of executing a method on a stack-based processor  | 712/202        |
| 37 | US<br>60761<br>41 A | <input type="checkbox"/> | Look-up switch accelerator and method of operating same   | 711/108        |
| 38 | US<br>60544<br>26 A | <input type="checkbox"/> | Optically active aliphatic alcohols and their use as perfuming ingredients  | 512/22         |
| 39 | US<br>60264<br>85 A | <input type="checkbox"/> | Instruction folding for a stack-based machine   | 712/226        |
| 40 | US<br>60214<br>69 A | <input type="checkbox"/> | Hardware virtual machine instruction processor  | 711/125        |
| 41 | US<br>60031<br>28 A | <input type="checkbox"/> | Number of pipeline stages and loop length related counter differential based end-loop prediction                                  | 712/241        |
| 42 | US<br>55726<br>71 A | <input type="checkbox"/> | Method for operating application software in a safety critical environment  | 714/47         |
| 43 | US<br>46972<br>33 A | <input type="checkbox"/> | Partial duplication of pipelined stack with data integrity checking   | 711/169        |
| 44 | US<br>41326<br>14 A | <input type="checkbox"/> | Etching by sputtering from an intermetallic target to form negative metallic ions which produce etching of a juxtaposed substrate | 204/192<br>.32 |



|    | Docum<br>ent<br>ID           | U                                   | Title   | Current<br>OR  |
|----|------------------------------|-------------------------------------|---|----------------|
| 1  | US<br>20030<br>12332<br>0 A1 | <input type="checkbox"/>            | Synchronous dynamic random access memory device   | 365/233        |
| 2  | US<br>20030<br>07120<br>7 A1 | <input checked="" type="checkbox"/> | Deconvolution method and apparatus for analyzing compounds  | 250/282        |
| 3  | US<br>20020<br>14787<br>2 A1 | <input checked="" type="checkbox"/> | Sequentially performed compound compare-and-swap  | 710/200        |
| 4  | US<br>20020<br>11761<br>5 A1 | <input checked="" type="checkbox"/> | Deconvolution method and apparatus for analyzing compounds  | 250/282        |
| 5  | US<br>66652<br>22 B2         | <input checked="" type="checkbox"/> | Synchronous dynamic random access memory device   | 365/203        |
| 6  | US<br>66313<br>69 B1         | <input checked="" type="checkbox"/> | Method and system for incremental web crawling  | 707/4          |
| 7  | US<br>66239<br>35 B2         | <input checked="" type="checkbox"/> | Deconvolution method and apparatus for analyzing compounds  | 435/7.1        |
| 8  | US<br>65299<br>30 B1         | <input checked="" type="checkbox"/> | Methods and apparatus for performing a signed saturation operation  | 708/552        |
| 9  | US<br>65248<br>03 B2         | <input checked="" type="checkbox"/> | Deconvolution method and apparatus for analyzing compounds  | 435/7.1        |
| 10 | US<br>65127<br>11 B1         | <input checked="" type="checkbox"/> | Synchronous dynamic random access memory device   | 365/203        |
| 11 | US<br>64776<br>39 B1         | <input checked="" type="checkbox"/> | Branch instruction mechanism for processor  | 712/237        |
| 12 | US<br>63737<br>52 B1         | <input checked="" type="checkbox"/> | Synchronous dynamic random access memory device   | 365/189<br>.05 |
| 13 | US<br>63569<br>97 B1         | <input checked="" type="checkbox"/> | Emulating branch instruction of different instruction set in a mixed instruction stream in a dual mode system                               | 712/237        |
| 14 | US<br>63514<br>04 B1         | <input checked="" type="checkbox"/> | Synchronous dynamic random access memory device   | 365/51         |
| 15 | US<br>62233<br>35 B1         | <input checked="" type="checkbox"/> | Platform independent double compare and swap operation  | 717/100        |
| 16 | US<br>62157<br>09 B1         | <input checked="" type="checkbox"/> | Synchronous dynamic random access memory device   | 365/189<br>.11 |
| 17 | US<br>62153<br>89 B1         | <input checked="" type="checkbox"/> | Time-independent, event-based system for receiving and discriminating unique codes from multiple transmitters and method for doing the same | 340/5.1        |
| 18 | US<br>62121<br>11 B1         | <input checked="" type="checkbox"/> | Synchronous dynamic random access memory device   | 365/200        |
| 19 | US<br>62090<br>87 B1         | <input checked="" type="checkbox"/> | Data processor with multiple compare extension instruction  | 712/300        |
| 20 | US<br>61729<br>35 B1         | <input checked="" type="checkbox"/> | Synchronous dynamic random access memory device   | 365/233        |
| 21 | US<br>61449<br>86 A          | <input checked="" type="checkbox"/> | System for sorting in a multiprocessor environment  | 709/201        |

|    | Docum<br>ent<br>ID  | U                                   | Title   | Current<br>OR  |
|----|---------------------|-------------------------------------|---|----------------|
| 22 | US<br>61377<br>07 A | <input checked="" type="checkbox"/> | Method and apparatus for simultaneously performing a plurality of compare operations in content addressable memory device   | 365/49         |
| 23 | US<br>61287<br>10 A | <input checked="" type="checkbox"/> | Method utilizing a set of blocking-symbol resource-manipulation instructions for protecting the integrity of data in noncontiguous data objects of resources in a shared memory of a multiple processor computer system | 711/152        |
| 24 | US<br>61187<br>67 A | <input checked="" type="checkbox"/> | Interference control for CDMA networks using a plurality of narrow antenna beams and an estimation of the number of users/remote signals present  | 370/252        |
| 25 | US<br>60322<br>53 A | <input checked="" type="checkbox"/> | Data processor with multiple compare extension instruction  | 712/300        |
| 26 | US<br>59419<br>95 A | <input checked="" type="checkbox"/> | Reloading state analyzer  | 714/39         |
| 27 | US<br>57377<br>54 A | <input checked="" type="checkbox"/> | Cache memory which selects one of several blocks to update by digitally combining control bits in all the blocks  | 711/136        |
| 28 | US<br>53294<br>89 A | <input checked="" type="checkbox"/> | DRAM having exclusively enabled column buffer blocks  | 365/189<br>.05 |
| 29 | US<br>50903<br>51 A | <input checked="" type="checkbox"/> | Vessel hull construction and method   | 114/65R        |
| 30 | US<br>50254<br>58 A | <input checked="" type="checkbox"/> | Apparatus for decoding frames from a data link  | 375/365        |
| 31 | US<br>46189<br>68 A | <input type="checkbox"/>            | Output compare system and method automatically controlling multiple outputs in a data processor   | 377/39         |

|   | Docum<br>ent<br>ID          | U                        | Title   | Current<br>OR |
|---|-----------------------------|--------------------------|---|---------------|
| 1 | US<br>20020<br>14787<br>2 A | <input type="checkbox"/> | Compound compare-and-swap operation implementation method in distributed computer system, involves reserving memory locations addressed by compare-and-swap instructions based on fixed total order of memory locations |               |
| 2 | US<br>51931<br>87 A         | <input type="checkbox"/> | Fast interrupt mechanism for multiprocessor system - uses set of registers to identify association among multiple processors and comparison matrix to select processors   |               |
| 3 | DE<br>37194<br>06 A         | <input type="checkbox"/> | Correcting errors in digital audio data - reading from magnetic tape by using double recording, comparison and two sets of test words   |               |

|    | Docum<br>ent<br>ID           | U                        | Title   | Current<br>OR |
|----|------------------------------|--------------------------|---|---------------|
| 1  | US<br>20040<br>01551<br>0 A1 | <input type="checkbox"/> | Obstruction-free synchronization for shared data structures     | 707/101       |
| 2  | US<br>20030<br>22962<br>0 A1 | <input type="checkbox"/> | Method for efficient processing of multi-state attributes       | 707/2         |
| 3  | US<br>20030<br>21283<br>0 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 709/251       |
| 4  | US<br>20030<br>20463<br>6 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 709/251       |
| 5  | US<br>20030<br>20034<br>3 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 709/251       |
| 6  | US<br>20030<br>20034<br>2 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 709/251       |
| 7  | US<br>20030<br>20033<br>9 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 709/250       |
| 8  | US<br>20030<br>19607<br>6 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 712/234       |
| 9  | US<br>20030<br>19599<br>1 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 709/251       |
| 10 | US<br>20030<br>19599<br>0 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 709/251       |
| 11 | US<br>20030<br>19598<br>9 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 709/251       |
| 12 | US<br>20030<br>19504<br>6 A1 | <input type="checkbox"/> | Target shooting scoring and timing system                       | 463/49        |
| 13 | US<br>20030<br>19186<br>3 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 709/251       |
| 14 | US<br>20030<br>19186<br>2 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 709/251       |
| 15 | US<br>20030<br>19186<br>1 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 709/251       |
| 16 | US<br>20030<br>18994<br>0 A1 | <input type="checkbox"/> | Communications system using rings architecture                  | 370/406       |
| 17 | US<br>20030<br>18246<br>5 A1 | <input type="checkbox"/> | Lock-free implementation of dynamic-sized shared data structure | 719/314       |

|    | Docum<br>ent<br>ID           | U                        | Title  | Current<br>OR  |
|----|------------------------------|--------------------------|--|----------------|
| 18 | US<br>20030<br>18246<br>2 A1 | <input type="checkbox"/> | Value recycling facility for multithreaded computations  | 719/310        |
| 19 | US<br>20030<br>17457<br>2 A1 | <input type="checkbox"/> | Non-blocking memory management mechanism for supporting dynamic-sized data structures            | 365/230<br>.03 |
| 20 | US<br>20030<br>17225<br>7 A1 | <input type="checkbox"/> | Communications system using rings architecture   | 712/234        |
| 21 | US<br>20030<br>17219<br>0 A1 | <input type="checkbox"/> | Communications system using rings architecture   | 709/251        |
| 22 | US<br>20030<br>17218<br>9 A1 | <input type="checkbox"/> | Communications system using rings architecture   | 709/251        |
| 23 | US<br>20030<br>16734<br>8 A1 | <input type="checkbox"/> | Communications system using rings architecture   | 709/251        |
| 24 | US<br>20030<br>14008<br>5 A1 | <input type="checkbox"/> | Single-word lock-free reference counting   | 718/107        |
| 25 | US<br>20030<br>09845<br>7 A1 | <input type="checkbox"/> | Scan testing system, method, and apparatus   | 257/48         |
| 26 | US<br>20030<br>06500<br>8 A1 | <input type="checkbox"/> | Selective estrogen receptor modulators in combination with estrogens                             | 514/311        |
| 27 | US<br>20030<br>04051<br>0 A1 | <input type="checkbox"/> | Selective estrogen receptor modulators in combination with estrogens                             | 514/177        |
| 28 | US<br>20020<br>19817<br>9 A1 | <input type="checkbox"/> | Selective estrogen receptor modulators in combination with estrogens                             | 514/102        |
| 29 | US<br>20020<br>09127<br>8 A1 | <input type="checkbox"/> | Steroid derived antibiotics  | 552/9          |
| 30 | US<br>20020<br>01992<br>8 A1 | <input type="checkbox"/> | Processing architecture having a compare capability  | 712/222        |
| 31 | US<br>20020<br>01937<br>6 A1 | <input type="checkbox"/> | Steroid derived antibiotics  | 514/169        |
| 32 | US<br>65325<br>31 B1         | <input type="checkbox"/> | Method frame storage using multiple memory circuits  | 712/202        |
| 33 | US<br>64861<br>48 B2         | <input type="checkbox"/> | Steroid derived antibiotics  | 514/182        |
| 34 | US<br>63507<br>38 B1         | <input type="checkbox"/> | Steroid derived antibiotics  | 514/182        |
| 35 | US<br>61638<br>37 A          | <input type="checkbox"/> | Writing of instruction results produced by instruction execution circuits to result destinations | 712/216        |

|    | Docum<br>ent<br>ID  | U                                   | Title   | Current<br>OR  |
|----|---------------------|-------------------------------------|---|----------------|
| 36 | US<br>61254<br>39 A | <input type="checkbox"/>            | Process of executing a method on a stack-based processor  | 712/202        |
| 37 | US<br>60761<br>41 A | <input type="checkbox"/>            | Look-up switch accelerator and method of operating same   | 711/108        |
| 38 | US<br>60544<br>26 A | <input type="checkbox"/>            | Optically active aliphatic alcohols and their use as perfuming ingredients  | 512/22         |
| 39 | US<br>60264<br>85 A | <input type="checkbox"/>            | Instruction folding for a stack-based machine   | 712/226        |
| 40 | US<br>60214<br>69 A | <input type="checkbox"/>            | Hardware virtual machine instruction processor  | 711/125        |
| 41 | US<br>60031<br>28 A | <input type="checkbox"/>            | Number of pipeline stages and loop length related counter differential based end-loop prediction                                  | 712/241        |
| 42 | US<br>56665<br>35 A | <input checked="" type="checkbox"/> | Microprocessor and data flow microprocessor having vector operation function  | 718/104        |
| 43 | US<br>55726<br>71 A | <input type="checkbox"/>            | Method for operating application software in a safety critical environment  | 714/47         |
| 44 | US<br>54045<br>53 A | <input checked="" type="checkbox"/> | Microprocessor and data flow microprocessor having vector operation function  | 712/25         |
| 45 | US<br>50815<br>72 A | <input checked="" type="checkbox"/> | Manipulation of time-ordered lists and instructions therefor  | 711/163        |
| 46 | US<br>46972<br>33 A | <input type="checkbox"/>            | Partial duplication of pipelined stack with data integrity checking   | 711/169        |
| 47 | US<br>41326<br>14 A | <input type="checkbox"/>            | Etching by sputtering from an intermetallic target to form negative metallic ions which produce etching of a juxtaposed substrate | 204/192<br>.32 |

|   | L # | Hits  | Search Text  | DBs                                 |
|---|-----|-------|--|-------------------------------------|
| 1 | L14 | 18430 | (rais\$3 signal\$4 handl\$3 cancel\$4 invalid\$5 valid\$3 prevent\$3 inhibit\$3) near10 (exception trap\$3 fault) near10 (memory read\$3 page access\$3 cache fetch\$3 load\$3 second location position line address data operand) | USPAT;<br>US-PGPUB                  |
| 2 | L16 | 26203 | instruction near20 ((plural plurality multiple multiplicity several two second) adj5 (memory cache page access\$3 read load\$3 fetch\$3 location position address line data operand))  | USPAT;<br>US-PGPUB                  |
| 3 | L18 | 2105  | 14 near20 ((second previous earlier subsequent next first) near10 (memory cache page access\$3 read load\$3 fetch\$3 location position address line data operand))   | USPAT;<br>US-PGPUB                  |
| 4 | L19 | 432   | 16 and 18  | USPAT;<br>US-PGPUB                  |
| 5 | L20 | 10866 | (rais\$3 signal\$4 handl\$3 cancel\$4 invalid\$5 valid\$3 prevent\$3 inhibit\$3) near10 (exception trap\$3 fault) near10 (memory read\$3 page access\$3 cache fetch\$3 load\$3 second location position line address data operand) | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 6 | L21 | 447   | 20 near20 ((second previous earlier subsequent next first) near10 (memory cache page access\$3 read load\$3 fetch\$3 location position address line data operand))   | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 7 | L22 | 6101  | instruction near20 ((plural plurality multiple multiplicity several two second) adj5 (memory cache page access\$3 read load\$3 fetch\$3 location position address line data operand))  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |
| 8 | L23 | 8     | 21 and 22  | EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB |

|   | Document ID          | U                        | Title  | Current OR |
|---|----------------------|--------------------------|--|------------|
| 1 | JP<br>04040<br>587 A | <input type="checkbox"/> | PORTABLE ELECTRONIC EQUIPMENT  |            |
| 2 | WO<br>97131<br>98 A1 | <input type="checkbox"/> | SELF-MODIFYING CODE HANDLING SYSTEM  |            |
| 3 | EP<br>61419<br>3 A2  | <input type="checkbox"/> | Method and apparatus for detecting retention faults in memories.   |            |
| 4 | US<br>57747<br>09 A  | <input type="checkbox"/> | Exception handling method e.g. for MIPS microprocessor, microcontroller - involves setting first bit to second logic state and registering address of immediately previous executed instruction when immediately previous instruction is branching related instruction |            |
| 5 | US<br>57648<br>84 A  | <input type="checkbox"/> | Procedure execution monitoring apparatus for multiprocessor computer system - monitors procedure during time between first and second exceptions which are raised when instruction address and address of instructions subsequent to branch instructions are reached   |            |
| 6 | EP<br>61419<br>3 A   | <input type="checkbox"/> | Integrated circuit memory retention fault detection - causing each memory bank to execute three test sequences, each sequence delayed to allow detection of bit pattern from previous sequence   |            |
| 7 | EP<br>42390<br>6 A   | <input type="checkbox"/> | Predicting and optimising bidirectional program branches - including nullify bit in branch instruction which controls whether or not spatially following instruction will be nullified   |            |
| 8 | EP<br>39975<br>7 A   | <input type="checkbox"/> | Paired instruction processor precise exception handling mechanism - has stages for memory and ALU operations, and data writing procedures respectively   |            |



|    | Document ID                  | U                                   | Title  | Current OR |
|----|------------------------------|-------------------------------------|--|------------|
| 1  | US<br>20040<br>05487<br>6 A1 | <input type="checkbox"/>            | Synchronising pipelines in a data processing apparatus   | 712/218    |
| 2  | US<br>20040<br>05487<br>2 A1 | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution  | 712/206    |
| 3  | US<br>20040<br>03091<br>2 A1 | <input checked="" type="checkbox"/> | Systems and methods for the prevention of unauthorized use and manipulation of digital content   | 713/200    |
| 4  | US<br>20040<br>01989<br>1 A1 | <input checked="" type="checkbox"/> | Method and apparatus for optimizing performance in a multi-processing system   | 718/102    |
| 5  | US<br>20040<br>01988<br>0 A1 | <input checked="" type="checkbox"/> | Write-through caching a java local variable within a register of a register bank   | 717/136    |
| 6  | US<br>20040<br>01977<br>4 A1 | <input checked="" type="checkbox"/> | Processor device and information processing device, compiling device, and compiling method using said processor device   | 712/244    |
| 7  | US<br>20040<br>01977<br>0 A1 | <input checked="" type="checkbox"/> | Optimization apparatus, compiler program, optimization method and recording medium   | 712/227    |
| 8  | US<br>20040<br>01976<br>8 A1 | <input checked="" type="checkbox"/> | Method and system for using dynamic, deferred operation information to control eager deferral of control-speculative loads   | 712/216    |
| 9  | US<br>20030<br>19571<br>5 A1 | <input checked="" type="checkbox"/> | Automatic test vector generation method, test method making use of the test vectors as automatically generated, chip manufacturing method and automatic test vector generation program | 702/117    |
| 10 | US<br>20030<br>18790<br>4 A1 | <input checked="" type="checkbox"/> | Device virtualization and assignment of interconnect devices   | 718/1      |
| 11 | US<br>20030<br>18254<br>3 A1 | <input checked="" type="checkbox"/> | TRAINING LINE PREDICTOR FOR BRANCH TARGETS   | 712/237    |
| 12 | US<br>20030<br>16738<br>7 A1 | <input checked="" type="checkbox"/> | Vector transfer system generating address error exception when vector to be transferred does not start and end on same memory page   | 712/4      |
| 13 | US<br>20030<br>14525<br>1 A1 | <input checked="" type="checkbox"/> | Dynamic trap table interposition for efficient collection of trap statistics   | 714/35     |
| 14 | US<br>20030<br>13584<br>4 A1 | <input checked="" type="checkbox"/> | Bytecode program interpreter apparatus and method with pre-verification of data type restrictions and object initialization  | 717/126    |
| 15 | US<br>20030<br>13571<br>7 A1 | <input checked="" type="checkbox"/> | Method and apparatus for transferring vector data  | 712/222    |
| 16 | US<br>20030<br>12096<br>0 A1 | <input checked="" type="checkbox"/> | Power management using processor throttling emulation  | 713/320    |
| 17 | US<br>20030<br>10594<br>3 A1 | <input checked="" type="checkbox"/> | Mechanism for processing speculative LL and SC instructions in a pipelined processor   | 712/216    |

|    | Docum<br>ent<br>ID           | U                                   | Title   | Current<br>OR |
|----|------------------------------|-------------------------------------|---|---------------|
| 18 | US<br>20030<br>09365<br>4 A1 | <input checked="" type="checkbox"/> | Handling of load errors in computer processors  | 712/220       |
| 19 | US<br>20030<br>09357<br>9 A1 | <input checked="" type="checkbox"/> | Method and system for concurrent handler execution in an SMI and PMI-based dispatch-execution framework | 719/318       |
| 20 | US<br>20030<br>07911<br>3 A1 | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution             | 712/205       |
| 21 | US<br>20030<br>07006<br>0 A1 | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution             | 712/23        |
| 22 | US<br>20030<br>06361<br>3 A1 | <input checked="" type="checkbox"/> | Label switched communication network and system and method for path restoration                         | 370/401       |
| 23 | US<br>20030<br>05608<br>7 A1 | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution             | 712/207       |
| 24 | US<br>20030<br>05608<br>6 A1 | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution             | 712/207       |
| 25 | US<br>20030<br>04605<br>3 A1 | <input checked="" type="checkbox"/> | Logic simulation  | 703/15        |
| 26 | US<br>20030<br>02875<br>9 A1 | <input checked="" type="checkbox"/> | EXCEPTION HANDLING FOR SIMD FLOATING POINT-INSTRUCTIONS   | 712/244       |
| 27 | US<br>20030<br>02383<br>7 A1 | <input checked="" type="checkbox"/> | Register file backup queue  | 712/228       |
| 28 | US<br>20020<br>19908<br>7 A1 | <input checked="" type="checkbox"/> | Configuration control within data processing systems  | 712/227       |
| 29 | US<br>20020<br>18447<br>7 A1 | <input checked="" type="checkbox"/> | Apparatus and method for facilitating debugging of sequences of processing instructions                 | 712/227       |
| 30 | US<br>20020<br>18429<br>2 A1 | <input checked="" type="checkbox"/> | Method and apparatus for exception handling in a multi-processing environment                           | 718/102       |
| 31 | US<br>20020<br>16999<br>9 A1 | <input checked="" type="checkbox"/> | Placing exception throwing instructions in compiled code  | 714/26        |
| 32 | US<br>20020<br>16611<br>3 A1 | <input checked="" type="checkbox"/> | Compiler generation of instruction sequences for unresolved storage references                          | 717/140       |
| 33 | US<br>20020<br>16198<br>9 A1 | <input checked="" type="checkbox"/> | Apparatus and method for storing instruction set information  | 712/227       |
| 34 | US<br>20020<br>15697<br>7 A1 | <input checked="" type="checkbox"/> | Virtual caching of regenerable data   | 711/118       |

|    | Docum<br>ent<br>ID           | U                                   | Title   | Current<br>OR |
|----|------------------------------|-------------------------------------|---|---------------|
| 35 | US<br>20020<br>15696<br>2 A1 | <input checked="" type="checkbox"/> | Microprocessor having improved memory management unit and cache memory  | 711/3         |
| 36 | US<br>20020<br>15437<br>0 A1 | <input checked="" type="checkbox"/> | Optic relay unit and terminal station in light transmission system  | 398/177       |
| 37 | US<br>20020<br>15225<br>9 A1 | <input checked="" type="checkbox"/> | Pre-committing instruction sequences  | 709/201       |
| 38 | US<br>20020<br>14787<br>2 A1 | <input checked="" type="checkbox"/> | Sequentially performed compound compare-and-swap  | 710/200       |
| 39 | US<br>20020<br>12416<br>0 A1 | <input checked="" type="checkbox"/> | Register file backup queue  | 712/228       |
| 40 | US<br>20020<br>10199<br>5 A1 | <input checked="" type="checkbox"/> | Microprocessor using asynchronous public key decryption processing  | 380/277       |
| 41 | US<br>20020<br>09200<br>2 A1 | <input checked="" type="checkbox"/> | Method and apparatus for preserving precise exceptions in binary translated code  | 717/137       |
| 42 | US<br>20020<br>09191<br>6 A1 | <input checked="" type="checkbox"/> | Embedded-DRAM-DSP architecture  | 712/228       |
| 43 | US<br>20020<br>08784<br>5 A1 | <input checked="" type="checkbox"/> | Embedded-DRAM-DSP architecture  | 712/228       |
| 44 | US<br>20020<br>08784<br>1 A1 | <input checked="" type="checkbox"/> | Circuit and method for supporting misaligned accesses in the presence of speculative load Instructions                            | 712/225       |
| 45 | US<br>20020<br>08780<br>6 A1 | <input checked="" type="checkbox"/> | Cache coherence protocol engine and method for efficient processing of interleaved memory transactions in a multiprocessor system | 711/141       |
| 46 | US<br>20020<br>07313<br>1 A1 | <input checked="" type="checkbox"/> | Unified exception handling for hierarchical multi-interrupt architectures   | 718/102       |
| 47 | US<br>20020<br>04045<br>1 A1 | <input checked="" type="checkbox"/> | Resource access control   | 714/42        |
| 48 | US<br>20020<br>04045<br>0 A1 | <input checked="" type="checkbox"/> | Multiple trap avoidance mechanism   | 714/8         |
| 49 | US<br>20020<br>04042<br>9 A1 | <input checked="" type="checkbox"/> | Embedded-DRAM-DSP architecture  | 712/228       |
| 50 | US<br>20020<br>04042<br>2 A1 | <input checked="" type="checkbox"/> | Resource access control for a processor   | 711/156       |
| 51 | US<br>20020<br>03271<br>9 A1 | <input checked="" type="checkbox"/> | Method and system of dynamic memory management  | 718/107       |

|    | Docu<br>ment<br>ID           | U                                   | Title   | Current<br>OR |
|----|------------------------------|-------------------------------------|---|---------------|
| 52 | US<br>20020<br>02932<br>8 A1 | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution   | 712/23        |
| 53 | US<br>20020<br>01988<br>7 A1 | <input checked="" type="checkbox"/> | Intercepting system API calls   | 719/328       |
| 54 | US<br>20020<br>01690<br>3 A1 | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution and concurrent results distribution   | 712/23        |
| 55 | US<br>20020<br>00266<br>9 A1 | <input checked="" type="checkbox"/> | DATA PROCESSOR  | 712/244       |
| 56 | US<br>20010<br>05653<br>0 A1 | <input checked="" type="checkbox"/> | SYSTEM FOR HANDLING LOAD ERRORS HAVING SYMBOLIC ENTITY GENERATOR TO GENERATE SYMBOLIC ENTITY AND ALU TO PROPAGATE THE SYMBOLIC ENTITY   | 712/220       |
| 57 | US<br>20010<br>05205<br>3 A1 | <input checked="" type="checkbox"/> | Stream processing unit for a multi-streaming processor  | 711/138       |
| 58 | US<br>20010<br>03458<br>8 A1 | <input checked="" type="checkbox"/> | System and method for abstracting and visualizing a rout map  | 703/2         |
| 59 | US<br>20010<br>02738<br>3 A1 | <input checked="" type="checkbox"/> | Method and apparatus to test an instruction sequence  | 702/188       |
| 60 | US<br>20010<br>00797<br>0 A1 | <input checked="" type="checkbox"/> | Automatic test vector generation method, test method making use of the test vectors as automatically generated, chip manufacturing method and automatic test vector generation program            | 702/117       |
| 61 | US<br>67049<br>23 B1         | <input checked="" type="checkbox"/> | System and method for pre-verification of stack usage in bytecode program loops   | 717/128       |
| 62 | US<br>67014<br>27 B1         | <input checked="" type="checkbox"/> | Data processing apparatus and method for processing floating point instructions   | 712/244       |
| 63 | US<br>66979<br>36 B2         | <input checked="" type="checkbox"/> | Register file backup queue  | 712/228       |
| 64 | US<br>66657<br>49 B1         | <input checked="" type="checkbox"/> | Bus protocol for efficiently transferring vector data   | 710/29        |
| 65 | US<br>66585<br>59 B1         | <input checked="" type="checkbox"/> | Method and apparatus for advancing load operations  | 712/245       |
| 66 | US<br>66548<br>69 B1         | <input checked="" type="checkbox"/> | Assigning a group tag to an instruction group wherein the group tag is recorded in the completion table along with a single instruction address for the group to facilitate in exception handling | 712/24        |
| 67 | US<br>66511<br>32 B1         | <input checked="" type="checkbox"/> | System and method for emulating the operation of a translation look-aside buffer  | 711/6         |
| 68 | US<br>66474<br>90 B2         | <input checked="" type="checkbox"/> | Training line predictor for branch targets  | 712/233       |
| 69 | US<br>66474<br>85 B2         | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution   | 712/23        |
| 70 | US<br>66369<br>59 B1         | <input checked="" type="checkbox"/> | Predictor miss decoder updating line predictor storing instruction fetch address and alignment information upon instruction decode termination condition  | 712/204       |

|    | Docum<br>ent<br>ID   | U                                   | Title  | Current<br>OR |
|----|----------------------|-------------------------------------|--|---------------|
| 71 | US<br>66315<br>14 B1 | <input checked="" type="checkbox"/> | Emulation system that uses dynamic binary translation and permits the safe speculation of trapping operations  | 717/137       |
| 72 | US<br>66313<br>92 B1 | <input checked="" type="checkbox"/> | Method and apparatus for predicting floating-point exceptions  | 708/498       |
| 73 | US<br>66292<br>31 B1 | <input checked="" type="checkbox"/> | System and method for efficient register file conversion of denormal numbers between scalar and SIMD formats   | 712/1         |
| 74 | US<br>66292<br>07 B1 | <input checked="" type="checkbox"/> | Method for loading instructions or data into a locked way of a cache memory  | 711/125       |
| 75 | US<br>66257<br>26 B1 | <input checked="" type="checkbox"/> | Method and apparatus for fault handling in computer systems  | 712/245       |
| 76 | US<br>66257<br>20 B1 | <input checked="" type="checkbox"/> | System for posting vector synchronization instructions to vector instruction queue to separate vector instructions from different application programs                                 | 712/4         |
| 77 | US<br>66222<br>69 B1 | <input checked="" type="checkbox"/> | Memory fault isolation apparatus and methods   | 714/718       |
| 78 | US<br>66222<br>18 B2 | <input checked="" type="checkbox"/> | Cache coherence protocol engine and method for efficient processing of interleaved memory transactions in a multiprocessor system  | 711/141       |
| 79 | US<br>66153<br>00 B1 | <input checked="" type="checkbox"/> | Fast look-up of indirect branch destination in a dynamic translation system  | 710/100       |
| 80 | US<br>66117<br>79 B2 | <input checked="" type="checkbox"/> | Automatic test vector generation method, test method making use of the test vectors as automatically generated, chip manufacturing method and automatic test vector generation program | 702/117       |
| 81 | US<br>66041<br>88 B1 | <input checked="" type="checkbox"/> | Pipeline replay support for multi-cycle operations wherein all VLIW instructions are flushed upon detection of a multi-cycle atom operation in a VLIW instruction                      | 712/24        |
| 82 | US<br>65981<br>28 B1 | <input checked="" type="checkbox"/> | Microprocessor having improved memory management unit and cache memory   | 711/144       |
| 83 | US<br>65947<br>85 B1 | <input checked="" type="checkbox"/> | System and method for fault handling and recovery in a multi-processing system having hardware resources shared between multiple partitions  | 714/48        |
| 84 | US<br>65947<br>50 B1 | <input checked="" type="checkbox"/> | Method and apparatus for handling an accessed bit in a page table entry  | 711/207       |
| 85 | US<br>65913<br>40 B2 | <input checked="" type="checkbox"/> | Microprocessor having improved memory management unit and cache memory   | 711/118       |
| 86 | US<br>65872<br>36 B1 | <input checked="" type="checkbox"/> | Fiber optic errorless switching system   | 398/5         |
| 87 | US<br>65811<br>50 B1 | <input checked="" type="checkbox"/> | Apparatus and method for improved non-page fault loads and stores  | 711/201       |
| 88 | US<br>65534<br>86 B1 | <input checked="" type="checkbox"/> | Context switching for vector transfer unit   | 712/222       |
| 89 | US<br>65534<br>60 B1 | <input checked="" type="checkbox"/> | Microprocessor having improved memory management unit and cache memory   | 711/125       |
| 90 | US<br>65499<br>59 B1 | <input checked="" type="checkbox"/> | Detecting modification to computer memory by a DMA device  | 710/22        |
| 91 | US<br>65465<br>46 B1 | <input checked="" type="checkbox"/> | Integrating operating systems and run-time systems   | 717/114       |
| 92 | US<br>65464<br>78 B1 | <input checked="" type="checkbox"/> | Line predictor entry with location pointers and control information for corresponding instructions in a cache line   | 712/204       |

|     | Docum<br>ent<br>ID   | U                                   | Title   | Current<br>OR |
|-----|----------------------|-------------------------------------|---|---------------|
| 93  | US<br>65430<br>06 B1 | <input checked="" type="checkbox"/> | Method and apparatus for automatic undo support   | 714/19        |
| 94  | US<br>65429<br>88 B1 | <input checked="" type="checkbox"/> | Sending both a load instruction and retrieved data from a load buffer to an annex prior to forwarding the load data to register file  | 712/225       |
| 95  | US<br>65360<br>08 B1 | <input checked="" type="checkbox"/> | Fault insertion method, boundary scan cells, and integrated circuit for use therewith   | 714/726       |
| 96  | US<br>65196<br>94 B2 | <input checked="" type="checkbox"/> | System for handling load errors having symbolic entity generator to generate symbolic entity and ALU to propagate the symbolic entity   | 712/220       |
| 97  | US<br>65131<br>07 B1 | <input checked="" type="checkbox"/> | Vector transfer system generating address error exception when vector to be transferred does not start and end on same memory page  | 712/4         |
| 98  | US<br>65052<br>91 B1 | <input checked="" type="checkbox"/> | Processor having a datapath and control logic constituted with basis execution blocks   | 712/201       |
| 99  | US<br>64969<br>26 B1 | <input checked="" type="checkbox"/> | Computer-implemented parameterless language with exception handler  | 712/245       |
| 100 | US<br>64931<br>16 B1 | <input checked="" type="checkbox"/> | PMD characterization across multiple optical channels of an optical link  | 398/20        |
| 101 | US<br>64777<br>02 B1 | <input checked="" type="checkbox"/> | Bytecode program interpreter apparatus and method with pre-verification of data type restrictions and object initialization   | 717/126       |
| 102 | US<br>64427<br>07 B1 | <input checked="" type="checkbox"/> | Alternate fault handler   | 714/10        |
| 103 | US<br>64306<br>57 B1 | <input checked="" type="checkbox"/> | COMPUTER SYSTEM THAT PROVIDES ATOMICITY BY USING A TLB TO INDICATE WHETHER AN EXPORTABLE INSTRUCTION SHOULD BE EXECUTED USING CACHE COHERENCY OR BY EXPORTING THE EXPORTABLE INSTRUCTION, AND EMULATES INSTRUCTIONS SPECIFYING A BUS LOCK | 711/138       |
| 104 | US<br>64250<br>39 B2 | <input checked="" type="checkbox"/> | Accessing exception handlers without translating the address  | 710/269       |
| 105 | US<br>64249<br>89 B1 | <input checked="" type="checkbox"/> | Object-oriented transaction computing system  | 709/201       |
| 106 | US<br>64120<br>43 B1 | <input checked="" type="checkbox"/> | Microprocessor having improved memory management unit and cache memory  | 711/118       |
| 107 | US<br>63973<br>79 B1 | <input checked="" type="checkbox"/> | Recording in a program execution profile references to a memory-mapped active device  | 717/140       |
| 108 | US<br>63857<br>12 B1 | <input checked="" type="checkbox"/> | Method and apparatus for segregation of virtual address space   | 711/206       |
| 109 | US<br>63816<br>92 B1 | <input checked="" type="checkbox"/> | Pipelined asynchronous processing   | 712/244       |
| 110 | US<br>63780<br>67 B1 | <input checked="" type="checkbox"/> | Exception reporting architecture for SIMD-FP instructions   | 712/244       |
| 111 | US<br>63743<br>47 B1 | <input checked="" type="checkbox"/> | Register file backup queue  | 712/228       |
| 112 | US<br>63603<br>14 B1 | <input checked="" type="checkbox"/> | Data cache having store queue bypass for out-of-order instruction execution and method for same   | 712/219       |
| 113 | US<br>63492<br>97 B1 | <input checked="" type="checkbox"/> | Information processing system for directing information request from a particular user/application, and searching/forwarding/retrieving information from unknown and large number of information resources                                | 707/4         |
| 114 | US<br>63453<br>51 B1 | <input checked="" type="checkbox"/> | Maintenance of speculative state of parallel executed jobs in an information processing system  | 711/203       |

|     | Docum<br>ent<br>ID   | U                                   | Title  | Current<br>OR |
|-----|----------------------|-------------------------------------|--|---------------|
| 115 | US<br>63433<br>41 B1 | <input checked="" type="checkbox"/> | Efficient access to variable-length data on a sequential access storage medium   | 711/111       |
| 116 | US<br>63339<br>31 B1 | <input checked="" type="checkbox"/> | Method and apparatus for interconnecting a circuit-switched telephony network and a packet-switched data network, and applications thereof | 370/385       |
| 117 | US<br>63291<br>39 B1 | <input checked="" type="checkbox"/> | Automated sorting system for matrices with memory  | 435/6         |
| 118 | US<br>63213<br>26 B1 | <input checked="" type="checkbox"/> | Prefetch instruction specifying destination functional unit and read/write access mode   | 712/207       |
| 119 | US<br>63049<br>63 B1 | <input checked="" type="checkbox"/> | Handling exceptions occurring during processing of vector instructions   | 712/244       |
| 120 | US<br>62894<br>46 B1 | <input checked="" type="checkbox"/> | Exception handling utilizing call instruction with context information   | 712/244       |
| 121 | US<br>62826<br>33 B1 | <input checked="" type="checkbox"/> | High data density RISC processor   | 712/208       |
| 122 | US<br>62826<br>30 B1 | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution and concurrent results distribution            | 712/23        |
| 123 | US<br>62791<br>01 B1 | <input checked="" type="checkbox"/> | Instruction decoder/dispatch   | 712/215       |
| 124 | US<br>62726<br>19 B1 | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution  | 712/41        |
| 125 | US<br>62601<br>90 B1 | <input checked="" type="checkbox"/> | Unified compiler framework for control and data speculation with recovery code   | 717/156       |
| 126 | US<br>62596<br>39 B1 | <input checked="" type="checkbox"/> | Semiconductor integrated circuit device capable of repairing defective parts in a large-scale memory                                       | 365/201       |
| 127 | US<br>62567<br>20 B1 | <input checked="" type="checkbox"/> | High performance, superscalar-based computer system with out-of-order instruction execution  | 712/23        |
| 128 | US<br>62533<br>17 B1 | <input checked="" type="checkbox"/> | Method and apparatus for providing and handling traps  | 712/244       |
| 129 | US<br>62471<br>71 B1 | <input checked="" type="checkbox"/> | Bytecode program interpreter apparatus and method with pre-verification of a data type restrictions and object initialization              | 717/126       |
| 130 | US<br>62464<br>22 B1 | <input checked="" type="checkbox"/> | Efficient method for storing texture maps in multi-bank memory   | 345/552       |
| 131 | US<br>62335<br>90 B1 | <input checked="" type="checkbox"/> | Server apparatus for distributed communications supporting multiple user/application environment   | 715/500       |
| 132 | US<br>62266<br>87 B1 | <input checked="" type="checkbox"/> | Method and apparatus for maintaining an order of data packets  | 709/246       |
| 133 | US<br>62198<br>28 B1 | <input checked="" type="checkbox"/> | Method for using two copies of open firmware for self debug capability   | 717/129       |
| 134 | US<br>62162<br>22 B1 | <input checked="" type="checkbox"/> | Handling exceptions in a pipelined data processing apparatus   | 712/244       |
| 135 | US<br>62162<br>18 B1 | <input checked="" type="checkbox"/> | Processor having a datapath and control logic constituted with basis execution blocks  | 712/201       |
| 136 | US<br>62090<br>83 B1 | <input checked="" type="checkbox"/> | Processor having selectable exception handling modes   | 712/229       |
| 137 | US<br>62022<br>04 B1 | <input checked="" type="checkbox"/> | Comprehensive redundant load elimination for architectures supporting control and data speculation   | 717/151       |

|     | Docum<br>ent<br>ID   | U                                   | Title   | Current<br>OR |
|-----|----------------------|-------------------------------------|---|---------------|
| 138 | US<br>61957<br>44 B1 | <input checked="" type="checkbox"/> | Unified multi-function operation scheduler for out-of-order execution in a superscalar processor  | 712/215       |
| 139 | US<br>61890<br>93 B1 | <input checked="" type="checkbox"/> | System for initiating exception routine in response to memory access exception by storing exception information and exception bit within architected register | 712/244       |
| 140 | US<br>61759<br>16 B1 | <input checked="" type="checkbox"/> | Common-thread inter-process function calls invoked by jumps to invalid addresses  | 712/228       |
| 141 | US<br>61612<br>08 A  | <input checked="" type="checkbox"/> | Storage subsystem including an error correcting cache and means for performing memory to memory transfers   | 714/764       |
| 142 | US<br>61417<br>42 A  | <input checked="" type="checkbox"/> | Method for reducing number of bits used in storage of instruction address pointer values  | 711/220       |
| 143 | US<br>61416<br>35 A  | <input checked="" type="checkbox"/> | Method of diagnosing faults in an emulated computer system via a heterogeneous diagnostic program   | 703/22        |
| 144 | US<br>61362<br>74 A  | <input checked="" type="checkbox"/> | Matrices with memories in automated drug discovery and units therefor   | 422/102       |
| 145 | US<br>61287<br>23 A  | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution   | 712/23        |
| 146 | US<br>61286<br>87 A  | <input checked="" type="checkbox"/> | Fast fault detection circuitry for a microprocessor   | 710/305       |
| 147 | US<br>61254<br>43 A  | <input checked="" type="checkbox"/> | Interrupt processing system and method for information processing system of pipeline control type   | 712/244       |
| 148 | US<br>61192<br>18 A  | <input checked="" type="checkbox"/> | Method and apparatus for prefetching data in a computer system  | 712/207       |
| 149 | US<br>61015<br>94 A  | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution   | 712/41        |
| 150 | US<br>60980<br>89 A  | <input checked="" type="checkbox"/> | Generation isolation system and method for garbage collection   | 718/104       |
| 151 | US<br>60947<br>29 A  | <input checked="" type="checkbox"/> | Debug interface including a compact trace record storage  | 714/25        |
| 152 | US<br>60921<br>81 A  | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution   | 712/206       |
| 153 | US<br>60887<br>89 A  | <input checked="" type="checkbox"/> | Prefetch instruction specifying destination functional unit and read/write access mode  | 712/207       |
| 154 | US<br>60790<br>15 A  | <input checked="" type="checkbox"/> | Data processing system having selectable exception table relocation and method therefor   | 712/244       |
| 155 | US<br>60759<br>40 A  | <input checked="" type="checkbox"/> | System and method for pre-verification of stack usage in bytecode program loops   | 717/126       |
| 156 | US<br>60732<br>26 A  | <input checked="" type="checkbox"/> | System and method for minimizing page tables in virtual memory systems  | 711/203       |
| 157 | US<br>60648<br>15 A  | <input checked="" type="checkbox"/> | System and method for generating fix-up code facilitating avoidance of an exception of a predetermined type in a digital computer system                      | 717/138       |
| 158 | US<br>RE366<br>73 E  | <input checked="" type="checkbox"/> | Viceband data set   | 375/220       |
| 159 | US<br>60527<br>74 A  | <input checked="" type="checkbox"/> | Apparatus and method for identifying exception routines indicated by instruction address issued with an instruction fetch command                             | 712/200       |
| 160 | US<br>60498<br>66 A  | <input checked="" type="checkbox"/> | Method and system for an efficient user mode cache manipulation using a simulated instruction   | 712/227       |



|     | Docum<br>ent<br>ID  | U                                   | Title   | Current<br>OR |
|-----|---------------------|-------------------------------------|---|---------------|
| 161 | US<br>60386<br>61 A | <input checked="" type="checkbox"/> | Single-chip data processor handling synchronous and asynchronous exceptions by branching from a first exception handler to a second exception handler                           | 712/244       |
| 162 | US<br>60386<br>54 A | <input checked="" type="checkbox"/> | High performance, superscalar-based computer system with out-of-order instruction execution   | 712/23        |
| 163 | US<br>60386<br>53 A | <input checked="" type="checkbox"/> | High-performance superscalar-based computer system with out-of-order instruction execution and concurrent results distribution  | 712/23        |
| 164 | US<br>60354<br>22 A | <input checked="" type="checkbox"/> | Data processing system for controlling execution of a debug function and method therefor  | 714/35        |
| 165 | US<br>60265<br>01 A | <input checked="" type="checkbox"/> | Data processing system for controlling execution of a debug function and method thereof   | 714/38        |
| 166 | US<br>60095<br>16 A | <input checked="" type="checkbox"/> | Pipelined microprocessor with efficient self-modifying code detection and handling  | 712/244       |
| 167 | US<br>60092<br>61 A | <input checked="" type="checkbox"/> | Preprocessing of stored target routines for emulating incompatible instructions on a target processor   | 703/26        |
| 168 | US<br>60031<br>29 A | <input checked="" type="checkbox"/> | System and method for handling interrupt and exception events in an asymmetric multiprocessor architecture  | 712/244       |
| 169 | US<br>60031<br>23 A | <input checked="" type="checkbox"/> | Memory system with global address translation   | 711/207       |
| 170 | US<br>59997<br>31 A | <input checked="" type="checkbox"/> | Bytecode program interpreter apparatus and method with pre-verification of data type restrictions and object initialization   | 717/126       |
| 171 | US<br>59875<br>99 A | <input checked="" type="checkbox"/> | Target instructions prefetch cache  | 712/238       |
| 172 | US<br>59875<br>85 A | <input checked="" type="checkbox"/> | One-chip microprocessor with error detection on the chip  | 712/1         |
| 173 | US<br>59830<br>04 A | <input checked="" type="checkbox"/> | Computer, memory, telephone, communications, and transportation system and methods  | 709/227       |
| 174 | US<br>59789<br>02 A | <input checked="" type="checkbox"/> | Debug interface including operating system access of a serial/parallel debug port   | 712/227       |
| 175 | US<br>59665<br>30 A | <input checked="" type="checkbox"/> | Structure and method for instruction boundary machine state restoration   | 712/244       |
| 176 | US<br>59665<br>29 A | <input checked="" type="checkbox"/> | Processor having auxiliary operand register file and complementary arrangements for non-disruptively performing adjunct execution   | 712/228       |
| 177 | US<br>59648<br>93 A | <input checked="" type="checkbox"/> | Data processing system for performing a trace function and method therefor  | 714/39        |
| 178 | US<br>59637<br>37 A | <input checked="" type="checkbox"/> | Interrupt vectoring for trace exception facility in computer systems  | 712/244       |
| 179 | US<br>59616<br>29 A | <input checked="" type="checkbox"/> | High performance, superscalar-based computer system with out-of-order instruction execution   | 712/23        |
| 180 | US<br>59502<br>21 A | <input checked="" type="checkbox"/> | Variably-sized kernel memory stacks   | 711/100       |
| 181 | US<br>59499<br>96 A | <input checked="" type="checkbox"/> | Processor having a variable number of stages in a pipeline  | 712/244       |
| 182 | US<br>59480<br>95 A | <input checked="" type="checkbox"/> | Method and apparatus for prefetching data in a computer system  | 712/200       |
| 183 | US<br>59304<br>95 A | <input checked="" type="checkbox"/> | Method and system for processing a first instruction in a first processing environment in response to initiating processing of a second instruction in an emulation environment | 703/26        |

|     | Docum<br>ent<br>ID  | U                                   | Title   | Current<br>OR |
|-----|---------------------|-------------------------------------|---|---------------|
| 184 | US<br>59268<br>32 A | <input checked="" type="checkbox"/> | Method and apparatus for aliasing memory data in an advanced microprocessor   | 711/141       |
| 185 | US<br>59206<br>90 A | <input checked="" type="checkbox"/> | Method and apparatus for providing access protection in an integrated circuit   | 713/200       |
| 186 | US<br>59180<br>05 A | <input checked="" type="checkbox"/> | Apparatus region-based detection of interference among reordered memory operations in a processor   | 714/38        |
| 187 | US<br>59130<br>50 A | <input checked="" type="checkbox"/> | Method and apparatus for providing address-size backward compatibility in a processor using segmented memory  | 711/213       |
| 188 | US<br>59078<br>60 A | <input checked="" type="checkbox"/> | System and method of retiring store data from a write buffer  | 711/117       |
| 189 | US<br>59077<br>08 A | <input checked="" type="checkbox"/> | System and method for facilitating avoidance of an exception of a predetermined type in a digital computer system by providing fix-up code for an instruction in response to detection of an exception condition resulting from execution thereof | 712/244       |
| 190 | US<br>59058<br>81 A | <input checked="" type="checkbox"/> | Delayed state writes for an instruction processor   | 712/219       |
| 191 | US<br>59039<br>18 A | <input checked="" type="checkbox"/> | Program counter age bits  | 711/220       |
| 192 | US<br>59037<br>39 A | <input checked="" type="checkbox"/> | System and method for processing load instruction in accordance with "no-fault" processing facility including arrangement for preserving access fault indicia   | 712/216       |
| 193 | US<br>58988<br>77 A | <input checked="" type="checkbox"/> | Processor using special instruction set to enhance exception handling   | 710/260       |
| 194 | US<br>58986<br>27 A | <input checked="" type="checkbox"/> | Semiconductor memory having redundant memory cell array   | 365/200       |
| 195 | US<br>58901<br>89 A | <input checked="" type="checkbox"/> | Memory management and protection system for virtual memory in computer system   | 711/100       |
| 196 | US<br>58871<br>89 A | <input checked="" type="checkbox"/> | Microcontroller system for performing operations of multiple microcontrollers   | 712/32        |
| 197 | US<br>58840<br>62 A | <input checked="" type="checkbox"/> | Microprocessor with pipeline status integrity logic for handling multiple stage writeback exceptions  | 712/218       |
| 198 | US<br>58840<br>59 A | <input checked="" type="checkbox"/> | Unified multi-function operation scheduler for out-of-order execution in a superscalar processor  | 712/215       |
| 199 | US<br>58812<br>62 A | <input checked="" type="checkbox"/> | Method and apparatus for blocking execution of and storing load operations during their execution   | 712/216       |
| 200 | US<br>58812<br>61 A | <input type="checkbox"/>            | Processing system that rapidly identifies first or second operations of selected types for execution  | 712/214       |

|    | Docum<br>ent<br>ID  | U                                   | Title   | Current<br>OR |
|----|---------------------|-------------------------------------|---|---------------|
| 1  | US<br>58988<br>77 A | <input type="checkbox"/>            | Processor using special instruction set to enhance exception handling   | 710/260       |
| 2  | US<br>58986<br>27 A | <input checked="" type="checkbox"/> | Semiconductor memory having redundant memory cell array   | 365/200       |
| 3  | US<br>58901<br>89 A | <input checked="" type="checkbox"/> | Memory management and protection system for virtual memory in computer system   | 711/100       |
| 4  | US<br>58871<br>89 A | <input checked="" type="checkbox"/> | Microcontroller system for performing operations of multiple microcontrollers   | 712/32        |
| 5  | US<br>58840<br>62 A | <input checked="" type="checkbox"/> | Microprocessor with pipeline status integrity logic for handling multiple stage writeback exceptions  | 712/218       |
| 6  | US<br>58840<br>59 A | <input checked="" type="checkbox"/> | Unified multi-function operation scheduler for out-of-order execution in a superscalar processor  | 712/215       |
| 7  | US<br>58812<br>62 A | <input checked="" type="checkbox"/> | Method and apparatus for blocking execution of and storing load operations during their execution   | 712/216       |
| 8  | US<br>58812<br>61 A | <input type="checkbox"/>            | Processing system that rapidly indentifies first or second operations of selected types for execution   | 712/214       |
| 9  | US<br>58812<br>16 A | <input checked="" type="checkbox"/> | Register file backup queue  | 714/15        |
| 10 | US<br>58677<br>12 A | <input checked="" type="checkbox"/> | Single chip integrated circuit system architecture for document instruction set computing   | 717/127       |
| 11 | US<br>58648<br>77 A | <input checked="" type="checkbox"/> | Apparatus and method for fast forwarding of table index (TI) bit for descriptor table selection   | 711/208       |
| 12 | US<br>58549<br>13 A | <input checked="" type="checkbox"/> | Microprocessor with an architecture mode control capable of supporting extensions of two distinct instruction-set architectures   | 712/210       |
| 13 | US<br>58453<br>31 A | <input checked="" type="checkbox"/> | Memory system including guarded pointers  | 711/163       |
| 14 | US<br>58452<br>98 A | <input checked="" type="checkbox"/> | Write barrier system and method for trapping garbage collection page boundary crossing pointer stores   | 707/206       |
| 15 | US<br>58450<br>64 A | <input checked="" type="checkbox"/> | Method for testing and verification of a CPU using a reference model  | 714/33        |
| 16 | US<br>58322<br>92 A | <input checked="" type="checkbox"/> | High-performance superscalar-based computer system with out-of-order instruction execution and concurrent results distribution  | 712/23        |
| 17 | US<br>58322<br>89 A | <input checked="" type="checkbox"/> | System for estimating worst time duration required to execute procedure calls and looking ahead/preparing for the next stack operation of the forthcoming procedure calls | 712/30        |
| 18 | US<br>58261<br>09 A | <input checked="" type="checkbox"/> | Method and apparatus for performing multiple load operations to the same memory location in a computer system   | 710/39        |
| 19 | US<br>58260<br>73 A | <input checked="" type="checkbox"/> | Self-modifying code handling system   | 712/226       |
| 20 | US<br>58128<br>10 A | <input checked="" type="checkbox"/> | Instruction coding to support parallel execution of programs  | 712/216       |
| 21 | US<br>58092<br>71 A | <input checked="" type="checkbox"/> | Method and apparatus for changing flow of control in a processor  | 712/208       |
| 22 | US<br>58060<br>68 A | <input checked="" type="checkbox"/> | Document data processor for an object-oriented knowledge management system containing a personal database in communication with a packet processor                        | 707/103<br>R  |
| 23 | US<br>57991<br>65 A | <input checked="" type="checkbox"/> | Out-of-order processing that removes an issued operation from an execution pipeline upon determining that the operation would cause a lengthy pipeline delay              | 712/214       |

|    | Docum<br>ent<br>ID  | U                                   | Title  | Current<br>OR |
|----|---------------------|-------------------------------------|--|---------------|
| 24 | US<br>57908<br>46 A | <input checked="" type="checkbox"/> | Interrupt vectoring for instruction address breakpoint facility in computer systems  | 712/244       |
| 25 | US<br>57782<br>45 A | <input checked="" type="checkbox"/> | Method and apparatus for dynamic allocation of multiple buffers in a processor   | 712/23        |
| 26 | US<br>57713<br>63 A | <input checked="" type="checkbox"/> | Single-chip microcomputer having an expandable address area  | 712/200       |
| 27 | US<br>57614<br>13 A | <input checked="" type="checkbox"/> | Fault containment system for multiprocessor with shared memory   | 714/49        |
| 28 | US<br>57581<br>68 A | <input checked="" type="checkbox"/> | Interrupt vectoring for optionally architected facilities in computer systems  | 710/260       |
| 29 | US<br>57520<br>13 A | <input checked="" type="checkbox"/> | Method and apparatus for providing precise fault tracing in a superscalar microprocessor   | 712/227       |
| 30 | US<br>57519<br>85 A | <input checked="" type="checkbox"/> | Processor structure and method for tracking instruction status to maintain precise state   | 712/218       |
| 31 | US<br>57519<br>83 A | <input checked="" type="checkbox"/> | Out-of-order processor with a memory subsystem which handles speculatively dispatched load operations  | 712/216       |
| 32 | US<br>57457<br>58 A | <input checked="" type="checkbox"/> | System for regulating multicomputer data transfer by allocating time slot to designated processing task according to communication bandwidth capabilities and modifying time slots when bandwidth change | 718/102       |
| 33 | US<br>57457<br>24 A | <input checked="" type="checkbox"/> | Scan chain for rapidly identifying first or second objects of selected types in a sequential list  | 712/213       |
| 34 | US<br>57427<br>55 A | <input checked="" type="checkbox"/> | Error-handling circuit and method for memory address alignment double fault  | 714/53        |
| 35 | US<br>57404<br>41 A | <input checked="" type="checkbox"/> | Bytecode program interpreter apparatus and method with pre-verification of data type restrictions and object initialization  | 717/134       |
| 36 | US<br>57403<br>98 A | <input checked="" type="checkbox"/> | Program order sequencing of data in a microprocessor with write buffer   | 711/117       |
| 37 | US<br>57375<br>16 A | <input checked="" type="checkbox"/> | Data processing system for performing a debug function and method therefor   | 714/38        |
| 38 | US<br>57297<br>28 A | <input checked="" type="checkbox"/> | Method and apparatus for predicting, clearing and redirecting unpredicted changes in instruction flow in a microprocessor  | 712/234       |
| 39 | US<br>57269<br>75 A | <input checked="" type="checkbox"/> | Switching system capable of performing alternative routing in accordance with an alternative routing scenario assembled in a maintenance terminal  | 370/228       |
| 40 | US<br>57245<br>36 A | <input checked="" type="checkbox"/> | Method and apparatus for blocking execution of and storing load operations during their execution  | 712/216       |
| 41 | US<br>57218<br>57 A | <input checked="" type="checkbox"/> | Method and apparatus for saving the effective address of floating point memory operations in an out-of-order microprocessor  | 712/23        |
| 42 | US<br>57178<br>83 A | <input checked="" type="checkbox"/> | Method and apparatus for parallel execution of computer programs using information providing for reconstruction of a logical sequential program  | 712/218       |
| 43 | US<br>57178<br>82 A | <input checked="" type="checkbox"/> | Method and apparatus for dispatching and executing a load operation to memory  | 712/217       |
| 44 | US<br>57130<br>12 A | <input checked="" type="checkbox"/> | Microprocessor   | 712/233       |
| 45 | US<br>57129<br>97 A | <input checked="" type="checkbox"/> | System and method for processing load instruction in accordance with "no-fault " processing facility including arrangement for preserving access fault indicia   | 712/217       |

|    | Docum<br>ent<br>ID  | U                                   | Title  | Current<br>OR |
|----|---------------------|-------------------------------------|--|---------------|
| 46 | US<br>57064<br>59 A | <input checked="" type="checkbox"/> | Processor having a variable number of stages in a pipeline   | 712/200       |
| 47 | US<br>57064<br>22 A | <input checked="" type="checkbox"/> | Method of locating fault of communication system   | 714/4         |
| 48 | US<br>57040<br>34 A | <input checked="" type="checkbox"/> | Method and circuit for initializing a data processing system   | 714/38        |
| 49 | US<br>56945<br>74 A | <input checked="" type="checkbox"/> | Method and apparatus for performing load operations in a computer system   | 711/140       |
| 50 | US<br>56921<br>70 A | <input checked="" type="checkbox"/> | Apparatus for detecting and executing traps in a superscalar processor   | 712/244       |
| 51 | US<br>56897<br>20 A | <input checked="" type="checkbox"/> | High-performance superscalar-based computer system with out-of-order instruction execution   | 712/23        |
| 52 | US<br>56873<br>44 A | <input checked="" type="checkbox"/> | Single-chip microcomputer having an expandable address area  | 711/220       |
| 53 | US<br>56873<br>38 A | <input checked="" type="checkbox"/> | Method and apparatus for maintaining a macro instruction for refetching in a pipelined processor   | 712/205       |
| 54 | US<br>56849<br>72 A | <input checked="" type="checkbox"/> | Programmable servo burst sequencer for a disk drive  | 711/4         |
| 55 | US<br>56734<br>26 A | <input checked="" type="checkbox"/> | Processor structure and method for tracking floating-point exceptions  | 712/244       |
| 56 | US<br>56734<br>08 A | <input checked="" type="checkbox"/> | Processor structure and method for renamable trap-stack  | 712/216       |
| 57 | US<br>56665<br>08 A | <input checked="" type="checkbox"/> | Four state two bit recoded alignment fault state circuit for microprocessor address misalignment fault generation                                      | 711/201       |
| 58 | US<br>56641<br>59 A | <input checked="" type="checkbox"/> | Method for emulating multiple debug breakpoints by page partitioning using a single breakpoint register  | 703/23        |
| 59 | US<br>56597<br>21 A | <input checked="" type="checkbox"/> | Processor structure and method for checkpointing instructions to maintain precise state  | 712/228       |
| 60 | US<br>56551<br>15 A | <input checked="" type="checkbox"/> | Processor structure and method for watchpoint of plural simultaneous unresolved branch evaluation  | 712/239       |
| 61 | US<br>56550<br>96 A | <input checked="" type="checkbox"/> | Method and apparatus for dynamic scheduling of instructions to ensure sequentially coherent data in a processor employing out-of-order execution       | 712/200       |
| 62 | US<br>56511<br>24 A | <input checked="" type="checkbox"/> | Processor structure and method for aggressively scheduling long latency instructions including load/store instructions while maintaining precise state | 712/215       |
| 63 | US<br>56491<br>36 A | <input checked="" type="checkbox"/> | Processor structure and method for maintaining and restoring precise state at any instruction boundary   | 712/244       |
| 64 | US<br>56447<br>42 A | <input checked="" type="checkbox"/> | Processor structure and method for a time-out checkpoint   | 712/244       |
| 65 | US<br>56405<br>83 A | <input checked="" type="checkbox"/> | Programmable servo burst decoder   | 713/600       |
| 66 | US<br>56405<br>38 A | <input checked="" type="checkbox"/> | Programmable timing mark sequencer for a disk drive  | 703/23        |
| 67 | US<br>56363<br>41 A | <input checked="" type="checkbox"/> | Fault processing method and information processing system  | 714/13        |
| 68 | US<br>56340<br>27 A | <input checked="" type="checkbox"/> | Cache memory system for multiple processors with collectively arranged cache tag memories  | 711/3         |

|    | Docum<br>ent<br>ID  | U                                   | Title   | Current<br>OR |
|----|---------------------|-------------------------------------|---|---------------|
| 69 | US<br>56301<br>58 A | <input checked="" type="checkbox"/> | Central processing unit including inhibited branch area   | 712/245       |
| 70 | US<br>56279<br>87 A | <input checked="" type="checkbox"/> | Memory management and protection system for virtual memory in computer system   | 711/200       |
| 71 | US<br>56243<br>16 A | <input checked="" type="checkbox"/> | Video game enhancer with intergral modem and smart card interface   | 463/45        |
| 72 | US<br>56110<br>64 A | <input checked="" type="checkbox"/> | Virtual memory system   | 711/209       |
| 73 | US<br>56030<br>33 A | <input checked="" type="checkbox"/> | Tool for debugging an operating system  | 717/124       |
| 74 | US<br>56008<br>48 A | <input checked="" type="checkbox"/> | Counterflow pipeline processor with instructions flowing in a first direction and instruction results flowing in the reverse direction                            | 712/42        |
| 75 | US<br>56008<br>44 A | <input checked="" type="checkbox"/> | Single chip integrated circuit system architecture for document installation set computing  | 715/500       |
| 76 | US<br>55985<br>53 A | <input checked="" type="checkbox"/> | Program watchpoint checking using paging with sub-page validity   | 703/23        |
| 77 | US<br>55967<br>17 A | <input checked="" type="checkbox"/> | Four state token passing alignment fault state circuit for microprocessor address misalignment fault generation   | 714/53        |
| 78 | US<br>55903<br>12 A | <input checked="" type="checkbox"/> | Method and apparatus for emulating circuitry in a computer system using a system management interrupt   | 703/23        |
| 79 | US<br>55881<br>13 A | <input checked="" type="checkbox"/> | Register file backup queue  | 714/15        |
| 80 | US<br>55840<br>09 A | <input checked="" type="checkbox"/> | System and method of retiring store data from a write buffer  | 711/117       |
| 81 | US<br>55772<br>00 A | <input checked="" type="checkbox"/> | Method and apparatus for loading and storing misaligned data on an out-of-order execution computer system   | 714/50        |
| 82 | US<br>55749<br>22 A | <input checked="" type="checkbox"/> | Processor with sequences of processor instructions for locked memory updates  | 712/220       |
| 83 | US<br>55683<br>80 A | <input checked="" type="checkbox"/> | Shadow register file for instruction rollback   | 700/79        |
| 84 | US<br>55600<br>32 A | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution and concurrent results distribution                                   | 712/23        |
| 85 | US<br>55600<br>13 A | <input checked="" type="checkbox"/> | Method of using a target processor to execute programs of a source architecture that uses multiple address spaces   | 717/138       |
| 86 | US<br>55399<br>11 A | <input checked="" type="checkbox"/> | High-performance, superscalar-based computer system with out-of-order instruction execution   | 712/23        |
| 87 | US<br>55375<br>59 A | <input checked="" type="checkbox"/> | Exception handling circuit and method   | 712/244       |
| 88 | US<br>55263<br>11 A | <input checked="" type="checkbox"/> | Method and circuitry for enabling and permanently disabling test mode access in a flash memory device   | 365/201       |
| 89 | US<br>55091<br>30 A | <input checked="" type="checkbox"/> | Method and apparatus for grouping multiple instructions, issuing grouped instructions simultaneously, and executing grouped instructions in a pipelined processor | 712/215       |
| 90 | US<br>55049<br>25 A | <input checked="" type="checkbox"/> | Apparatus and method for implementing interrupts in pipelined processors  | 712/244       |
| 91 | US<br>55028<br>27 A | <input checked="" type="checkbox"/> | Pipelined data processor for floating point and integer operation with exception handling   | 712/244       |

|     | Docu<br>ment<br>ID  | U                                   | Title   | Current<br>OR |
|-----|---------------------|-------------------------------------|---|---------------|
| 92  | US<br>54816<br>85 A | <input checked="" type="checkbox"/> | RISC microprocessor architecture implementing fast trap and exception state   | 712/244       |
| 93  | US<br>54796<br>18 A | <input checked="" type="checkbox"/> | I/O module with reduced isolation circuitry   | 700/23        |
| 94  | US<br>54715<br>98 A | <input checked="" type="checkbox"/> | Data dependency detection and handling in a microprocessor with write buffer  | 711/122       |
| 95  | US<br>54695<br>52 A | <input checked="" type="checkbox"/> | Pipelined data processor having combined operand fetch and execution stage to reduce number of pipeline stages and penalty associated with branch instructions        | 712/244       |
| 96  | US<br>54653<br>76 A | <input checked="" type="checkbox"/> | Microprocessor, coprocessor and data processing system using them   | 712/34        |
| 97  | US<br>54505<br>60 A | <input checked="" type="checkbox"/> | Pointer for use with a buffer and method of operation   | 711/200       |
| 98  | US<br>54505<br>55 A | <input checked="" type="checkbox"/> | Register logging in pipelined computer using register log queue of register content changes and base queue of register log queue pointers for respective instructions | 712/228       |
| 99  | US<br>54487<br>05 A | <input checked="" type="checkbox"/> | RISC microprocessor architecture implementing fast trap and exception state   | 712/244       |
| 100 | US<br>54468<br>76 A | <input checked="" type="checkbox"/> | Hardware mechanism for instruction/data address tracing   | 714/47        |
| 101 | US<br>54407<br>57 A | <input checked="" type="checkbox"/> | Data processor having multistage store buffer for processing exceptions   | 712/228       |
| 102 | US<br>54407<br>10 A | <input checked="" type="checkbox"/> | Emulation of segment bounds checking using paging with sub-page validity  | 711/207       |
| 103 | US<br>54407<br>03 A | <input checked="" type="checkbox"/> | System and method for saving state information in a multi-execution unit processor when interruptable instructions are identified                                     | 712/228       |
| 104 | US<br>54386<br>70 A | <input checked="" type="checkbox"/> | Method of prechecking the validity of a write access request  | 711/3         |
| 105 | US<br>54286<br>24 A | <input checked="" type="checkbox"/> | Fault injection using boundary scan   | 714/727       |
| 106 | US<br>54264<br>70 A | <input checked="" type="checkbox"/> | Luminance and chrominance signal separation circuit employing comparison of level detected signal with a reference level  | 348/668       |
| 107 | US<br>54230<br>13 A | <input checked="" type="checkbox"/> | System for addressing a very large memory with real or virtual addresses using address mode registers   | 711/163       |
| 108 | US<br>54045<br>57 A | <input checked="" type="checkbox"/> | Data processor with plural instruction execution parts for synchronized parallel processing and exception handling  | 712/23        |
| 109 | US<br>54044<br>99 A | <input checked="" type="checkbox"/> | Semi-automatic program execution error detection  | 714/54        |
| 110 | US<br>54003<br>21 A | <input checked="" type="checkbox"/> | Central monitoring system of a multiplex subscriber loop carrier  | 370/248       |
| 111 | US<br>53983<br>30 A | <input checked="" type="checkbox"/> | Register file backup queue  | 714/15        |
| 112 | US<br>53903<br>10 A | <input checked="" type="checkbox"/> | Memory management unit having cross-domain control  | 711/203       |
| 113 | US<br>53865<br>63 A | <input checked="" type="checkbox"/> | Register substitution during exception processing   | 712/228       |
| 114 | US<br>53814<br>19 A | <input checked="" type="checkbox"/> | Method and apparatus for detecting retention faults in memories   | 714/720       |

|     | Docum<br>ent<br>ID  | U                                   | Title   | Current<br>OR |
|-----|---------------------|-------------------------------------|---|---------------|
| 115 | US<br>53752<br>13 A | <input checked="" type="checkbox"/> | Address translation device and method for managing address information using the device   | 711/208       |
| 116 | US<br>53613<br>89 A | <input checked="" type="checkbox"/> | Apparatus and method for emulation routine instruction issue  | 703/27        |
| 117 | US<br>53613<br>56 A | <input checked="" type="checkbox"/> | Storage isolation with subspace-group facility  | 711/206       |
| 118 | US<br>53496<br>71 A | <input checked="" type="checkbox"/> | Microprocessor system generating instruction fetch addresses at high speed  | 712/234       |
| 119 | US<br>53496<br>51 A | <input checked="" type="checkbox"/> | System for translation of virtual to physical addresses by operating memory management processor for calculating location of physical address in memory concurrently with cache comparing virtual addresses for translation | 711/207       |
| 120 | US<br>53414<br>82 A | <input checked="" type="checkbox"/> | Method for synchronization of arithmetic exceptions in central processing units having pipelined execution units simultaneously executing instructions  | 712/244       |
| 121 | US<br>53252<br>99 A | <input checked="" type="checkbox"/> | System for classifying lightning strikes to enhance location estimation thereof   | 702/4         |
| 122 | US<br>53195<br>53 A | <input checked="" type="checkbox"/> | Lightning strike detection and mapping system with auto control of mapping display  | 702/4         |
| 123 | US<br>53136<br>47 A | <input checked="" type="checkbox"/> | Digital data processor with improved checkpointing and forking  | 718/102       |
| 124 | US<br>53094<br>44 A | <input checked="" type="checkbox"/> | Integrated circuit including a test cell for efficiently testing the accuracy of communication signals between a standard cell and an application cell  | 714/710       |
| 125 | US<br>53052<br>10 A | <input checked="" type="checkbox"/> | Sampled data lightning strike detection and mapping system capable of early detection of an invalid strike from sampled data and quick resumption of monitoring an incoming signal  | 702/4         |
| 126 | US<br>53031<br>52 A | <input checked="" type="checkbox"/> | Lightning strike detection system capable of quickly determining an invalid correlation of strike signaling   | 702/4         |
| 127 | US<br>52991<br>27 A | <input checked="" type="checkbox"/> | Lightning strike detection and mapping system capable of monitoring its power source and of displaying a representation thereof on the mapping display  | 702/4         |
| 128 | US<br>52972<br>63 A | <input checked="" type="checkbox"/> | Microprocessor with pipeline system having exception processing features  | 712/244       |
| 129 | US<br>52950<br>72 A | <input checked="" type="checkbox"/> | Sampled data lightning strike detection and mapping system capable of recovering a pre threshold sample history for detection and mapping processing  | 702/4         |
| 130 | US<br>52950<br>71 A | <input checked="" type="checkbox"/> | Sampled data lightning strike detection and mapping system capable of generating frequency spectrum of input signal waveforms and displaying such on the mapping display  | 702/4         |
| 131 | US<br>52768<br>48 A | <input checked="" type="checkbox"/> | Shared two level cache including apparatus for maintaining storage consistency  | 711/121       |
| 132 | US<br>52573<br>58 A | <input checked="" type="checkbox"/> | Method for counting the number of program instruction completed by a microprocessor   | 714/38        |
| 133 | US<br>52377<br>00 A | <input checked="" type="checkbox"/> | Exception handling processor for handling first and second level exceptions with reduced exception latency  | 712/244       |
| 134 | US<br>52337<br>02 A | <input checked="" type="checkbox"/> | Cache miss facility with stored sequences for data fetching   | 711/118       |
| 135 | US<br>52337<br>00 A | <input checked="" type="checkbox"/> | Address translation device with an address translation buffer loaded with presence bits   | 711/207       |
| 136 | US<br>52336<br>98 A | <input checked="" type="checkbox"/> | Method for operating data processors  | 713/601       |



|     | Docum<br>ent<br>ID  | U                                   | Title   | Current<br>OR |
|-----|---------------------|-------------------------------------|---|---------------|
| 137 | US<br>52187<br>11 A | <input checked="" type="checkbox"/> | Microprocessor having program counter registers for its coprocessors  | 712/34        |
| 138 | US<br>52108<br>34 A | <input checked="" type="checkbox"/> | High speed transfer of instructions from a master to a slave processor  | 712/207       |
| 139 | US<br>51931<br>81 A | <input checked="" type="checkbox"/> | Recovery method and apparatus for a pipelined processing unit of a multiprocessor system  | 714/2         |
| 140 | US<br>51406<br>84 A | <input checked="" type="checkbox"/> | Access privilege-checking apparatus and method  | 711/163       |
| 141 | US<br>51194<br>83 A | <input checked="" type="checkbox"/> | Application of state silos for recovery from memory management exceptions   | 714/15        |
| 142 | US<br>51135<br>21 A | <input checked="" type="checkbox"/> | Method and apparatus for handling faults of vector instructions causing memory management exceptions  | 714/15        |
| 143 | US<br>50954<br>26 A | <input checked="" type="checkbox"/> | Data processing system for effectively handling exceptions during execution of two different types of instructions  | 712/244       |
| 144 | US<br>50758<br>44 A | <input checked="" type="checkbox"/> | Paired instruction processor precise exception handling mechanism   | 712/218       |
| 145 | US<br>50620<br>41 A | <input checked="" type="checkbox"/> | Processor/coprocessor interface apparatus including microinstruction clock synchronization  | 712/221       |
| 146 | US<br>50438<br>67 A | <input checked="" type="checkbox"/> | Exception reporting mechanism for a vector processor  | 712/222       |
| 147 | US<br>50088<br>12 A | <input checked="" type="checkbox"/> | Context switching method and apparatus for use in a vector processing system  | 712/228       |
| 148 | US<br>49949<br>61 A | <input checked="" type="checkbox"/> | Coprocessor instruction format  | 710/110       |
| 149 | US<br>49929<br>34 A | <input checked="" type="checkbox"/> | Reduced instruction set computing apparatus and methods   | 712/209       |
| 150 | US<br>49858<br>25 A | <input checked="" type="checkbox"/> | System for delaying processing of memory access exceptions until the execution stage of an instruction pipeline of a virtual memory system based digital computer | 711/169       |
| 151 | US<br>RE333<br>80 E | <input checked="" type="checkbox"/> | Voiceband data set  | 375/220       |
| 152 | US<br>49597<br>82 A | <input checked="" type="checkbox"/> | Access arbitration for an input-output controller   | 710/240       |
| 153 | US<br>49492<br>50 A | <input checked="" type="checkbox"/> | Method and apparatus for executing instructions for a vector processing system  | 712/208       |
| 154 | US<br>49492<br>41 A | <input checked="" type="checkbox"/> | Microcomputer system including a master processor and a slave processor synchronized by three control lines   | 710/110       |
| 155 | US<br>49166<br>95 A | <input checked="" type="checkbox"/> | Stored program controlled real time system including three substantially identical processors   | 714/11        |
| 156 | US<br>49145<br>78 A | <input checked="" type="checkbox"/> | Method and apparatus for interrupting a coprocessor   | 710/260       |
| 157 | US<br>48902<br>53 A | <input checked="" type="checkbox"/> | Predetermination of result conditions of decimal operations   | 708/525       |
| 158 | US<br>48796<br>76 A | <input checked="" type="checkbox"/> | Method and apparatus for precise floating point exceptions  | 708/505       |
| 159 | US<br>48751<br>60 A | <input checked="" type="checkbox"/> | Method for implementing synchronous pipeline exception recovery   | 712/228       |

|     | Docum<br>ent<br>ID  | U                                   | Title  | Current<br>OR |
|-----|---------------------|-------------------------------------|--|---------------|
| 160 | US<br>48687<br>38 A | <input checked="" type="checkbox"/> | Operating system independent virtual memory computer system  | 710/26        |
| 161 | US<br>48519<br>90 A | <input checked="" type="checkbox"/> | High performance processor interface between a single chip processor and off chip memory means having a dedicated and shared bus structure | 710/100       |
| 162 | US<br>48477<br>48 A | <input checked="" type="checkbox"/> | Virtual memory arrangement data processing system with decoding and execution of prefetched instructions in parallel                       | 712/212       |
| 163 | US<br>48414<br>39 A | <input checked="" type="checkbox"/> | Method for restarting execution interrupted due to page fault in a data processing system  | 712/244       |
| 164 | US<br>48212<br>31 A | <input checked="" type="checkbox"/> | Method and apparatus for selectively evaluating an effective address for a coprocessor   | 710/110       |
| 165 | US<br>48191<br>54 A | <input checked="" type="checkbox"/> | Memory back up system with one cache memory and two physically separated main memories   | 714/20        |
| 166 | US<br>48112<br>74 A | <input checked="" type="checkbox"/> | Method and apparatus for selectively evaluating an effective address for a coprocessor   | 712/203       |
| 167 | US<br>48091<br>25 A | <input checked="" type="checkbox"/> | Circuit interrupter apparatus with a style saving rating plug  | 361/93.<br>3  |
| 168 | US<br>47978<br>16 A | <input checked="" type="checkbox"/> | Virtual memory supported processor having restoration circuit for register recovering  | 711/220       |
| 169 | US<br>47775<br>93 A | <input checked="" type="checkbox"/> | Vector processing apparatus including means for identifying the occurrence of exceptions in the processing of vector elements              | 712/9         |
| 170 | US<br>47605<br>18 A | <input checked="" type="checkbox"/> | Bi-directional databus system for supporting superposition of vector and scalar operations in a computer                                   | 710/107       |
| 171 | US<br>47589<br>78 A | <input checked="" type="checkbox"/> | Method and apparatus for selectively evaluating an effective address for a coprocessor   | 710/110       |
| 172 | US<br>47589<br>50 A | <input checked="" type="checkbox"/> | Method and apparatus for selectively delaying an interrupt of a coprocessor  | 710/269       |
| 173 | US<br>47574<br>45 A | <input checked="" type="checkbox"/> | Method and apparatus for validating prefetched instruction   | 712/207       |
| 174 | US<br>47574<br>40 A | <input checked="" type="checkbox"/> | Pipelined data stack with access through-checking  | 714/53        |
| 175 | US<br>47501<br>10 A | <input checked="" type="checkbox"/> | Method and apparatus for executing an instruction contingent upon a condition present in another data processor                            | 710/110       |
| 176 | US<br>47348<br>65 A | <input checked="" type="checkbox"/> | Insertion machine with audit trail and command protocol  | 700/222       |
| 177 | US<br>47317<br>36 A | <input checked="" type="checkbox"/> | Method and apparatus for coordinating execution of an instruction by a selected coprocessor  | 710/110       |
| 178 | US<br>47290<br>94 A | <input checked="" type="checkbox"/> | Method and apparatus for coordinating execution of an instruction by a coprocessor   | 712/34        |
| 179 | US<br>47195<br>65 A | <input checked="" type="checkbox"/> | Interrupt and trap handling in microprogram sequencer  | 710/260       |
| 180 | US<br>47108<br>66 A | <input checked="" type="checkbox"/> | Method and apparatus for validating prefetched instruction   | 712/207       |
| 181 | US<br>46740<br>32 A | <input checked="" type="checkbox"/> | High-performance pipelined stack with over-write protection  | 711/169       |
| 182 | US<br>46548<br>19 A | <input checked="" type="checkbox"/> | Memory back-up system  | 711/162       |

|     | Docum<br>ent<br>ID  | U                                   | Title  | Current<br>OR |
|-----|---------------------|-------------------------------------|--|---------------|
| 183 | US<br>46480<br>64 A | <input checked="" type="checkbox"/> | Parallel process controller  | 710/45        |
| 184 | US<br>46009<br>86 A | <input checked="" type="checkbox"/> | Pipelined split stack with high performance interleaved decode   | 711/169       |
| 185 | US<br>45983<br>64 A | <input checked="" type="checkbox"/> | Efficient trace method adaptable to multiprocessors  | 714/38        |
| 186 | US<br>45970<br>41 A | <input checked="" type="checkbox"/> | Method and apparatus for enhancing the operation of a data processing system   | 712/248       |
| 187 | US<br>45919<br>72 A | <input checked="" type="checkbox"/> | Data processing system with unique microcode control   | 712/228       |
| 188 | US<br>45905<br>86 A | <input checked="" type="checkbox"/> | Forced clear of a memory time-out to a maintenance exerciser   | 711/151       |
| 189 | US<br>45690<br>18 A | <input checked="" type="checkbox"/> | Digital data processing system having dual-purpose scratchpad and address translation memory   | 711/207       |
| 190 | US<br>45625<br>36 A | <input checked="" type="checkbox"/> | Directory test error mode control apparatus  | 714/25        |
| 191 | US<br>45610<br>88 A | <input checked="" type="checkbox"/> | Communication system bypass architecture   | 370/222       |
| 192 | US<br>44930<br>27 A | <input checked="" type="checkbox"/> | Method of performing a call operation in a digital data processing system having microcode call and return operations                        | 712/228       |
| 193 | US<br>44815<br>73 A | <input checked="" type="checkbox"/> | Shared virtual address translation unit for a multiprocessor system  | 711/207       |
| 194 | US<br>44596<br>64 A | <input checked="" type="checkbox"/> | Multiprocessor computer system with dynamic allocation of multiprocessing tasks and processor for use in such multiprocessor computer system | 718/105       |
| 195 | US<br>44596<br>61 A | <input checked="" type="checkbox"/> | Channel address control system for a virtual machine system  | 718/100       |
| 196 | US<br>44569<br>52 A | <input checked="" type="checkbox"/> | Data processing system having redundant control processors for fault detection   | 714/11        |
| 197 | US<br>44556<br>44 A | <input checked="" type="checkbox"/> | Telecommunication fault detecting system   | 370/243       |
| 198 | US<br>44197<br>56 A | <input checked="" type="checkbox"/> | Voiceband data set   | 379/93.<br>32 |
| 199 | US<br>43487<br>21 A | <input checked="" type="checkbox"/> | System for selectively addressing nested link return addresses in a microcontroller  | 712/243       |
| 200 | US<br>43397<br>97 A | <input checked="" type="checkbox"/> | Microcontroller with auxiliary register for duplicating storage of data in one memory location   | 712/223       |